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SONGS OF THE NGONI PEOPLE

By MARGARET READ

INTRODUCTION

Nearly 120 years ago the Ngoni left their homeland in the South during the upheavals of Chaka's wars. In Nyasaland where the majority of them settled, they began to mix with the local tribes, preserving certain Ngoni institutions which they had brought from the south, to which they clung tenaciously as proof of their political and social superiority over their neighbours. Predominant among these exclusive Ngoni institutions were their songs and dances. The musician listening to the phrasing, rhythm and harmonies of Ngoni music knows that here is something of rare and distinctive beauty. The linguist studying the words of songs recognises the old Ngoni language, closely akin to old Zulu and Swazi. The social anthropologist watching the dancing and singing can see an expression of the "national" spirit of the Ngoni, and watch how social distinctions mark off the true aristocrats from the former slaves, the latter being excluded from taking part in the dance.

Not being either a musician or a linguist but a mere social anthropologist, I have made a selection of Ngoni songs to show how they are interwoven with the great events of their life, both in their historic past and in the crises of their life today. I hope that this selection may evoke criticism and comment from scholars in South Africa who are familiar with old Zulu and Swazi songs of the same type in the early part of the 19th century. It may be of course that the departure of the Ngoni proved a means of preserving their heritage of music and song, and that in spite of mixing with other tribes for 120 years, they have kept some songs which have been lost in the changes that have been taken place in the south during those years. That is one of the reasons which has prompted me to put forward this selection as a test, as it were, of continuity of culture, and the means by which that continuity is maintained. One interesting fact bearing on this question of continuity has come out during the process of collecting songs. There are in Nyasaland two distinct groups of Ngoni, one

See article in Africa, Vol. IX, No. 4, Oct 1936, on "Tradition and prestige among the Ngoni" by the author.

under the leadership of the Jere clan, the other under the Maseko clan, known today as Mwambera's and Gomani's people. These two groups left for the south independently, and except for two fights on the way north, never intermingled either in their journeyings or in their subsequent settlement. I have already found among them however a small group of songs, varying very slightly in words though not in music, which as both groups possess them in common must, I think, be proof that these songs were known to them before leaving the south. The recorded number of these songs held in common is small at present, but I think further research would reveal a number more.

On the linguistic side I am well aware of the deficiencies in the recording of these songs. When taking them down a number of varying renderings were given, some alleged to suit the music, others just "We say this or this." In the recording I have had the invaluable help of Rev. Yesaya Mlonyeni Chibambo, an Ngoni of Mwambera's people. I have accepted his spelling of the songs in his area, and have tried to record myself the songs in Gomani's area.* For translation purposes I have used a Zulu dictionary (Colenso), checking Rev. Y. M. Chibambo's English version in his area and getting, where I could, a Nyanja equivalent in Gomani's area to assist translation. I am not at all satisfied either with the recording or the translating, and can only plead that an anthropologist working with three languages expects to be attacked by the real linguists for any texts he dares to put forward.

The selection and arrangement of songs

The musician studying Ngoni music would begin to classify the songs under two heads; those sung by groups and those sung by individuals. Among the latter are the only Ngoni songs sung to an instrumental accompaniment, namely those sung to the *igubu* or *uhlanga*.² Nevertheless some of these *igubu* songs are sometimes sung by groups at marriages or initiation rites, and vice versa. The group songs of the Ngoni have no instrumental accompaniment, and the absence of all drums in Ngoni music is one of the outstanding characteristics, in comparison with the music of the local tribes. There is however usually accompaniment of some kind to Ngoni group songs. The men stamp their feet, or knock their shields, or whistle shrilly through their teeth. The women clap their hands, or trill by stroking their cheek

We have revised the Ngoni spelling in accord with the new Zulu orthography —[Ed. Bantu Studies].

²An instrument shaped like a bow with a gourd pressed against the body. The string is struck with a stick.

with the thumb or pinching the lips together with the finger and thumb, or hum in harmonies. This humming and the rhythmical stamping of the men's feet which reverberates in the dry dung of the cattle kraal or the newly softened earth of the first rains, are the most characteristic, as well as the most aesthetically beautiful, forms of accompaniment.

The Ngoni themselves in old days divided their dances into two kinds, those for pleasure or pastime, and those for serious purposes such as war and religion. In these days however they say the distinction no longer exists as all are now really dances for pastime.

I have chosen a third form of grouping for the songs: those which are related to different stages in the life cycle of the Ngoni, and those which draw together people and recall their past. To the first group belong lullabies, initiation rite songs, marriage songs, mourning songs, and songs of the *izanusi* when people went to them for divining in times of trouble or sickness. To the second group belong war songs, praise songs of chiefs, *ingoma* songs, and a few fragments of *inqwala* songs.

A word should be added here on the composition of Ngoni songs as the people themselves explain it. Songs are never composed separately, words and music. It is always a single inspiration which leads the composer to find the right words and the right music. This applies both to songs which one man sings, such as praise songs, songs for the igubu, or songs of an isanusi; and equally to songs such as ingoma, umgubu, mthimba for group singing. Such inspiration for composing songs is recognised as a special gift, possessed only by a few individuals. These people have isifua, which is literally the chest, said to be the seat of inspiration and eloquence. Thanks to isifua a man or a woman can compose on the spur of the moment a song for a wedding or about the deed of a hero, and also today a Christian hymn. Such inspiration fortunately does not appear to be dying out, and the competitive visits of groups for singing and dancing from village to village after the harvest are a means of spreading these modern songs as they spread the old.

SECTION I

A. Lullabies:

As might be expected songs in Ngoni relating to women's work were very few, because in the course of time all the true Ngoni women assumed the role of aristocrats and had a number of attendant women who did all their work for them. I once asked a Maseko woman if there

were any Ngoni songs sung while pounding maize. She looked at me with great scorn and replied "As if the Angoni women ever pounded!" The same is true to a lesser extent of lullabies, for nursemaids were always employed in Ngoni households, and though some of them learned Ngoni lullabies, most of them sang their own lullabies to the children. These are two illustrations of Ngoni lullabies which have persisted and are widely known in Mwambera's country.

(1) Ngoni:

Einda mntanami
Eya eya
Einda mntanami
Eya eya
Maguqa nazo oyiye
Maguqa nazo oyiye
Ho tivun' umumbu,

English:

Hush my child
Never mind, never mind.
Hush my child
Never mind, never mind.
There is a busy-body gossiping
There is a busy-body gossiping
Ho! we reap the maize.

(2) Ngoni:

UKholwane, Kholwane kaMakhwaphuna
UKholwane, Kholwane kaMakhwaphuna
Amasi omtakababa
Uhamba uyawakhwaphuna
Uyawafafaza
Ngezindlela zaboyihlo
Zathi ngci ngci.

UKholwane, Kholwane kaMakhwaphuna UKholwane, Kholwane kaMakhwaphuna Uthweleni na? Ngithwele 'kudla komntwana Uhamba ukuchoboza Ngezindlela zomnyama. English:

Kholwane, Kholwane, son of Makhwaphuna
The curds belonging to the child of my father
You go about dipping from them (the curds)
You are sprinkling them³ (the curds)
So that the paths of your fathers
Have completely become shut.⁴

Kholwane, Kholwane, son of Makhwaphuna
What are you carrying?

I am carrying the food of the baby
For he goes about defiling it⁵
On the dark paths.

B. Umsindo songs:

Umsindo or umgonxo was the girls' initiation ceremony which took place, not at puberty, but several years later as a preliminary to marriage. It was only celebrated for the daughters of important people and was an occasion for a great gathering with much feasting and dancing. The songs sung at this time belonged chiefly to the older women (umsindo songs are only sung by adults), though men joined in them too. They show a wide variety of subjects, ranging from warnings against jealousy in women to songs about historical events. Formerly as well as today umsindo songs are sung on other occasions, such as funerals for example, and many of them are sung as solos to the accompaniment of the igubu. They seem with the ingoma songs and mthimba to be songs of civil life as opposed to the periods of warfare, times when the people gathered together for song and dance with no thoughts of fighting to trouble them. The umsindo ceremony of the daughter of an important man provided such an occasion, and songs of many kinds originated round that gathering, some with no reference at all to the particular nature of the rites performed. There were however some umsindo songs referring to sexual intercourse sung only at umsindo ceremonies, in which the terms and allusions were frankly obscene. These are seldom heard today, and were apparently discouraged by the real Ngoni in the past, as they inflamed the passions, and the Ngoni had

i.e. wasting them—amasi (curds) is always plural in its pronoun like the Scotch porridge.

⁴ The expression zathi ngci ngci is used of the ears being shut so that gossip cannot be heard.

Defiling—i.e. dipping into it with a dirty hand. The whole song is a reproach to someone who has brought food for a child and been careless with it.

a firm belief that sexual licence and lack of control was detrimental to the qualities needed in warfare.

The first three songs are warnings to the girl to be married against giving way to jealousy when living among the other wives.

(1) Ngoni:

Yo! mfaz' wobukhwele
Zhi-ha-a-wo!
Kuyahela zhi-ha-a-wo!
Yo! luvalo lwakhe
Yo! bukhwele bakhe.

English:

Behold thou woman who art jealous Thou art torn with pain⁶ Alas her panic⁷ Alas her jealousy.

(2) Ngoni:

Seuyakhonkotha Seuyakhonkotha Yo! mfazi wobukhwele Uyingwe! Uyingwe!

English:

Now thou art barking Now thou art barking Behold, woman of jealousy Thou art a leopard.8

(3) Ngoni:

Hoyayiyoyo indoda ilalepi?
Ngiyamfuna
He ngiyamfuna ngezinyawo ho
Ngiyamfuna.

⁶ Ukuhela—lit. to cut grass and is used figuratively to express a sharp cutting pain in the bowels—the bowels are the seat of sympathy and there a woman feels pain if her child is in trouble or if her husband goes to sleep in another home.

⁷ Uluvalo is used both for madness and for great fear.

^{*}i.e. she is fierce and ready to tear at you.

Hoyayiyoye ha
Indoda ilale endlini
Aye kwamayimkhuyu⁹
Hau mkhuyu
Hau mkhuyu mkhuyu
Indoda ilale endlini.

English:

(4

Woe is me! Where has my husband been sleeping?
I am looking for him
I am looking for him with my feet, ho!
Woe is me! My husband is sleeping in the house
He went to the big mother
Alas to the big one
My husband has been sleeping in the house.

The following song is very popular in Mwambera's country. It is said to be a lament of the women against the difficulties of polygamous households, and was so used by two Ngoni ministers in a recent campaign among the churches. They were speaking against polygamy and used this song which was well known as an illustration. The language of the song must be figurative for the Ngoni were continuously successful in war until the Europeans came, and long before their advent this song was known. This explanation of its meaning therefore may be correct. It is often sung as a solo to the *igubu*.

		-
)	Zizwe zonke Zimemelene thina Zizwe zonke Zimemelene thina-nje Siyakuyibuza kubani?	All the nations Are called together against us All the nations Are just called together against us Whom shall we ask about this?
	Siyakulwa sithini Zimemeleni thina Siyakuyimemaphi ?	How shall we fight They are called together against us Whence shall we summon help?
	Amagananda ho Zimemelene thina Sothelelwa ngubani	The big husky ones, ho! They are called together against us We are reinforced by whom?
	Mhlaba uyemuka Zimemelene thina Zingongo zonke	The earth is departing ¹⁰ They are called together against us We are in disfavour with everything
_		

⁹ This song is from Bomani's country and Chinyanja expressions have crept in.

L and Y are sometimes interchangeable here, especially in songs.

19 i.e. everything has gone from us—goods, glory, happiness,

Sihlalukelwe-e-e Zimemelene thina Mhlaba uyafutha We are deserted
They are called together against us
The earth breathes fire¹¹

This song refers to the approaching marriage of the girl, speaking of her as a victim to be killed, and her family as a fort to be entered. The "one who is selected" is the man whom the girl or boy could take the initiative in choosing a mate.

(5) Ngoni:

Sithi ngubani ozakubulawa lonyaka?
Makhonjwa sivulele inqaba
Singene
Sithi ngubani ozakubulawa lonyaka?

English:

We say who will be killed this year?
Thou chosen one open the fort for us
Let us enter
We say who will be killed this year?

The next three songs (6, 7, 8) are examples of historical songs sung on occasions of umsindo. They are three out of a large collection of such songs, and are also sung as solos to the igubu. The first two both refer to the departure of the Ngoni from the south. Zide or Zwide was chief of the Ndwandwe people among whom were most of the Ngoni. On his defeat by Chaka they left to begin their march northwards. The third song is said to have been composed on the journey. It contains the refrain "Let us return to Swaziland where the people die fat," which is also found in several other songs. It is suggested that the last six lines may be a veiled attack on the leader, Zwangenda6a, because he seemed to be attempting the impossible.

(6) Ngoni:

Uzide Mankosi kuSoshangane Ngilele ngingalalanga (repeat) Mnaye UZide Mankosi kuSoshangane Ngilele ngingalalanga

MUkufuta has the idea of something going on continuously, as a man gasping or steam issuing from a boiling pot. I have taken the simile here from a dragon breathing fire,

Hayi UShaka usichitha¹² ngamahlathi kuSoshangane Ngilele ngingalalanga.

English:

It is because of Zide, chief of the Soshangane people
That though I lie down I cannot sleep
O Zide chief of the Soshangane people
Though I lie down I cannot sleep.
Chaka scatters us among the forests of Soshangane land.

(7) Ngoni:

O qholosh' intanga (repeat
Ubondinda ngale phansi kwentaba
ENdabula-luvalo.
Ngolwani kuShaka?
Abantu baphelile phansi kwentaba
Elele Lohaya! (repeat)
Oyahoyo yahoyo yoya (repeat)
O qholosh' intanga (repeat).

English:

The man of our age-grade struts before us,
He wanders on the other side of the mountain
In the land of Panic.
Why should we fear Shaka?
The people are finished beneath the mountain
Alas! Lohaya
The man of our age-grade struts before us.

(8) Ngoni:

Oya yi yayo qobo yeya! (repeat)
Yo magcigca egumeni kwanazala
Yo Mnguni wakithi yowaliwayo
Owanyathel' udaka lwabathakathi
Ubomuke simuke siy' eSwazini
Laph' abantu bafa yokhuluphala
Eayimis' uluthi lomkhonto
Usuk' ungcangce uhlal'ephezulu
Yo Magwaza ngomunwe waqhuqhumba

¹⁵ This an example which occurs constantly in Ngoni songs of the use of the historic present into a past meaning.

Isandla sokudlela ngesokungcongca Ivila elidl' amaßel' okulimelwa Eathi kananyongo kanamhlehlo Zi zi ntshe entshi (repeat).

English:

Oya yi yayo, what does it matter!

Thou who joyest thine head in the entrance court of thy mother-in-law.

O Mnguni of our people who art rejected,
And hast walked on the mud of the wizards:
Come, let us go to Swaziland
Where the people die fat.

Where they set up the shafts of the spears
Which rise up and walk with their bodies erect.
Thou who stabbest with the finger and it swells up,
Take care, the hand which is for eating also destroys.
The idle man eats grain hoed for him.

While he boasts that he has no bile, nor fat round his stomach.

Zi, zi, ntshe, entshi.

C. Mthimba songs:

The *mthimba* or marriage ceremony of the Ngoni was a lengthy series of rites each of which had its appropriate songs. There were also some general *mthimba* songs which were interspersed with the special songs for each rite. Many of these general *mthimba* songs were sung at other times, and often as solos to the *igubu*. As in the *umsindo* songs some are historical and seem to bear no reference to marriage.

The first five songs refer to some event in the sequence of marriage rites. The general tone is that of sadness at giving up the girl to another family village, and the next two songs (6 and 7), sung by the bride herself, reflect the same feeling of exile from her family and friends. These songs can also be sung to the *igubu*.

(1) Ngoni: "Ukuconga umntwana."

Niwunzulane unzulane Yoßaßa ungidelile Ngiyakundinda kus' eßaleni Yoßaßa ungidelile. English: "The preparing of the girl (before she goes to her husband.)"

I am a stray, a stray
Behold my father has given me up
I shall wander to the wild country
My father has given me up¹³.

(2) Ngoni: "Ukuqandisa umlobokazi."

Hoya yi yoya
Yo mntwana wenzulane kowami
Hoya yi yoya
Yo mntwana ongenayise kowami na?
Hoya yi yoya

Yo maqanda ngegundane zimswelekile Sengiqandile bayiso kowami.

English: "The bringing of the bride's gift."

Hoya yi yoya

Thou child of a wanderer, thou art mine.

Thou child without a father, thou art mine.

Hoya yi yoya.

Thou who bringest a present like a house rat because thou hast no cattle.

I have now brought a present to my comrades.14

(3) Ngoni: "Umbedlo."

Zikuya yombedlo bayisa Zikuya Yombedlo bayisa Ngezakithi wayimemez' inkondlo Zikuya

Wayimemez' inkondlo.

English: "The song sung sitting."15

You lads¹⁶ it is the dancing time my comrades O comrades, a dance!

¹³ This song is sung by the girl herself with her companions joining in. She is still in her own village waiting to go with the gift to give her husband-to-be.

¹⁴ This song is sung by the older women of the village who stand in relation to the girl as her mother. It is the song of a poor girl, perhaps with no father, as she brings a small present, though it is also Ngoni etiquette to belittle any gift before the donor.

¹⁵ Ukubedla is to sing while sitting after the bride's gift is given.

¹⁶ Zikuya = the grown ones—i.e. ready for inclusion in a new regiment.

With the lads from our home he has called for the dance My comrades

He has called for the dance.17

(4) Ngoni: "Umbedlo."

Uyangena

Haye

Mayingene

Haye

Ntandane yangena

Uyangena haye

Siyangena haye

Ntandane yangena.

English: "The song sung sitting."

She is entering

Haye

Let us make her enter

Haye

The orphan is entering

She is entering—have

We are entering—have

The orphan is entering.

(5) Ngoni: "Ummekezo"

Sikhon' isilo sidl'abantu

Ngomnyama yomntwana uyakhala

Sikhon' isilo

Uyakhala yena yo mntwana

Sikhon' isilo.

English: "The deflowering." 18

There is a lion eating the people

In the darkness a child is mourning

There is a lion

She is mourning that child

There is a lion.

¹⁷ Inkondlo is used by the Ngoni with the same meaning as ingoma—i.e. dance and song.

¹⁶ This is one of the songs sung after the girl has slept with her husband for the first time.

(6) Ngoni:

Baba ngonile ngonile baba ngonile Kadi ungichel' ubaba ngaphik' inkani Seiyadlal' imiyoni ngaphik' inkani.

English:

Father I have done wrong, I have done wrong father
I have done wrong
You did tell me, my father, I have made a quarrel
(or) I have been disobedient
The birds' feathers are now playing 19 I have been disobedient.

(7) Ngoni:

Ngaphel' umoya Hoyayiyoyo ngaphel' umoya Zas' eNgucwini ziyehla ngaphesheya Ngaphel' umoyo.

English:

My breath is finished

My breath is finished

The cattle of eNgucwini²⁰ have descended on the other side

My breath is finished.

The following song is a very old *mthimba* song, but is sung today chiefly as an *igubu* song. Ngoni ministers have told me they use it in church meetings, because all the people know it and it reflects their old philosophy, and as such is made the basis for Christian teaching about death.

(8) Ngoni:

Umhlaba kawunoni. Uqed' indlu kuya nkuyu Siyakufel' emhlabeni. Nhi hi hi hi ! (in sobbing tones and nasally)

Umhlaßa kawunoni. Uqed' amakawu kawu Siyakufel' emhlaeni na? Nhi hi hi hi!

¹º The bride-to-be sometimes put feathers on her head when going to her husband's village. Now she sees the feathers shaking in the hut and is reminded by them of what her father told her.

A reference to the cattle given by the boy's father to the girl's family. On the completion of handing over the cattle the girl had to go to her husband.

Refrain:

Uyezwa mhlaba, sokulilel' uyezwa mhlaba! Sonke siyakufel' emhlabeni na? Nhi hi hi hi!

Umhlaßa kawunoni. Uqed' amakhosi-khosi Siyakufel' emhlaßeni na? Nhi hi hi hi! Umhlaßa kawunoni. Uqed' amakhosikazi Siyakufel' emhlaßeni na? Nhi hi hi hi!

Refrain:

Umhlaßa kawunoni. Uqed' aßalumuzana Siyakufel' emhlaßeni na? Nhi hi hi li! Umhlaßa kawunoni. Uqed' amakhosazana Siyakufel' emhlaßeni na? Nhi hi hi li!

Refrain:

Umhlaßa kawunoni. Uqed' aßafokazana Siyakufel' emhlaßeni na? Nhi hi hi ! Umhlaßa kawunoni. Uqed' nezilwanyana Siyakufel' emhlaßeni na? Nhi hi hi hi!

Uyezwa zilale wena wosalelizweni, ngci! Sonke soshony' emhlaßeni na? Ho ho ho ho! Uyezwa mhlaßa liyashon' iyangana, ngci! Sonke songen' emhlaßeni.

English:

The earth does not get fat²¹. It makes an end of those who wear the head plumes²²

We shall die on the earth.

The earth does not get fat. It makes an end of those who act swiftly as heroes.

Shall we die on the earth?

Listen O earth. We shall mourn because of you. Listen O earth. Shall we all die on the earth?

The earth does not get fat. It makes an end of the chiefs. Shall we all die on the earth?

The earth does not get fat. It makes an end of the women chiefs.

Shall we die on the earth?

²¹ Ukunona = never to be satisfied, because the earth is always receiving the dead.

²³ Indlunkulu is used for older men entitled to wear tall head feathers.

The earth does not get fat. It makes an end of the nobles. Shall we die on the earth?

The earth does not get fat. It makes an end of the royal women. Shall we die on the earth?

The earth does not get fat. It makes the end of the common people.

Shall we die on the earth?

The earth does not get fat. It makes an end of all the beasts. Shall we die on the earth?

Listen you who are asleep, who are left tightly closed in the land.

Shall we all sink into the earth? Listen O earth the sun is setting tightly. We shall all enter into the earth.

The next two songs (9 and 10) though called *mtimba* are usually sung to the *igubu*, and contain historical references. The first song refers to the fights on the road between Zwangendaba and two other leaders. Nqaba is said by some to be the same as Mzilikazi, and Soshangane was the founder of the Ngoni kingdom near Mozambique. The second song is one of many telling of the famous crossing of the Zambezi during a solar eclipse in November 1835. It was after the fights with Nqaba and Soshangane that Zwangendaba was forced to flee across the Zambezi.

(9) Ngoni:

Ngihlangane ngentombi kaMahamba
Uzenz' uhlanya njeng' oyise
Ngihlangane ngentombi kaMahamba
Uzenz' uhlanya njeng' oyise
Musani kungihlek'
Musani kungihlek'
Sengahlul' uNqaba
Ngahlul' USoshangane kaZigodo.

English:

Let me meet with the daughter of Mahamba She acts the madman like her father. I have met with the daughter of Mahamba She acts the madman like her father. Do not laugh at me
Do not laugh at me
Now I have conquered Nqaba
Now I have conquered Soshangane son of Zigodo.

(10) Ngoni:

Siwel' uZembezi²³ sawela ngentambo Samwela ngentambo Samwela ngentambo Mnawo yayoya

Sekwahlw' emini Mnawo yayoya Se kwash' ubani?

English:

When crossing the Zambezi we crossed with a rope
We crossed it with a rope
We crossed it with a rope
The sky darkened at day time
The lightning flashed.

D. Mourning songs.

There are no real mourning songs of the Ngoni as singing and dancing were not part of the burial rites except at the death of a chief, though at subsequent funeral rites, some months later, it is customary to dance *ingoma*. The first one is sung to the *igubu* and is obviously a woman's mourning for her husband. The second I heard a woman sing at the burial of her grandmother, and she said her grandmother had taught it to her. Many other *igubu* songs are in reality mourning songs.

(1) Ngoni:

Ngagolozela lashon' umyeni (repeat) Eathi ngitshengis' isizib' esinengwenya Ngizilahle Ngingokwenzan' elele na? (repeat)

English:

I have stared at the setting (death) of my husband. They say, show me the pool that has a crocodile. Let me throw myself away.

What can I do? Alas!

²³The Ngoni always say Zembezi and not Zambezi.

(2) Ngoni:

Namuhla ngiyakuloya
Nang' umthakathi
Wena wafa njani?
Muyanihleka, hlekani, ngingodingayo mina.
Ngithum' ubani?
Mwena muyatuma 'bantwana
Ngindinda nginje ngithum' endlini
Niyandinda nelidolo ngihamb' ematsheni
Ngingedwa ngithath' izigodo ngingedwa
Ha! niyakhalel' umtakomama.
Waza wangishiya phalubalala
Ngihlalela yena. Nizothini?

English:

Today I shall bewitch²⁴
Here is the witch.
You, how did you die?
You are laughing at me, laugh. I am poor, I.
Whom can I send?
You folk you are sending children.
I wander about by myself. I send to the house.
I wander about on my knees. I go on the stones²⁵.
Alone I carry branches, I alone.
Ha! I am crying for your child, mother.
She has gone. She has left me in a lonely place.²⁶
I stayed for her. What shall I say?

E. Songs of izanusi.

When trouble or sickness attacked the Ngoni their first act was to go to the *isanusi* and ask him to divine for them the cause of the trouble. There were several grades of *izanusi*, from those in "private practice" to those consulted by the chiefs in big state affairs and in time of war.

The first of these songs is an initiation song of an isanusi. The second refers to a very old prophecy among the Ngoni that their final downfall would "by way of the sea," and which they interpreted as the

²⁴ The grandmother actually died in alarming circumstances and there was talk of witchcraft for weeks afterwards.

²⁵The stones at the women's washing place.

²⁴ That is reading ebaleni for phalubalala.

coming of the Europeans. The next two songs (3 and 4) are those of a famous *isanusi* called Manyonkolo Camango, and the second one reflects the general despair at his death. The last two (5 and 6) I took from an old *isanusi* who still practises his art.

(1) Ngoni:

O uthwasile

He he
O ngomso nguwe

Hoya yi hoya.

English:

You are initiated Tomorrow it is you.

(2) Ngoni:

Mhany' unamandla, Mhanya, O!
Mhany' unamandla
Mhany' unamandla, Mhanya, O!
Luzay' olwandle Mhanya, O!
Uza ngolwandle
Uza ngolwandle Mhanya O!

English:

Mhanya thou art the strong one It comes, it of the sea He comes by the sea.

(3) Ngoni:

Sibingelelwa ngubani?
Sambon' UManyonkolo.
Sibingelelwa ngubani?
Elele! Camango.

English:

We are saluted by whom?

Behold we see Manyonkolo.

We are saluted by whom?

Alas? Camango.

(4) Ngoni:

Hoya yi yawoyo Hoya yi hoya Siyekele sindinde sihambe
Ilizwe liphelile kuManyonkolo
Siyekele sindinde sihambe
Siyekel' amaßel' adliw' izindlovu
Siyekele sindinde sihambe
Ilizwe liphelile kuManyonkolo
Siyekele sindinde sihambe,

English:

Let us alone that we may wander, let us go,
The land is finished with Manyonkolo.

Let us alone that we may wander, let us go,
Let us alone, the grain is eaten by elephants.

Let us alone that we may wander, let us go,
The land is finished with Manyonkolo.

Let us alone that we may wander, let us go.

(5) Ngoni:

Ubaba uyangibiza Hamba ekhaya Hamba ekhaya Indaba zikuyandele.

English:

My father is calling me
Go home
Go home
Things have turned against you.

(6) Ngoni:

Uyezwa 'mihlolo ?
O ha o.
Uyezwa 'mihlolo ?
O ha o.

English:

Do you understand the omens?

Another version:

Ngoni:

Uyezwa 'mihlolo? Eya e Uyezwa 'mihlolo?
Eya e
Inkanyezi eye hoya woyo
Ipuma e
Impumayanga.

English:

Do you understand the omens?

The star

Comes out
In the East.

SECTION II.

A. Songs of inquala.

When describing their songs and dances the Ngoni say "We had many beautiful dances but the best of all were those of inqwala." This took place in February at the time of the first ripening of certain crops, and seems to have a first fruit and fertility ceremony, as well as a general gathering of the tribe. These inqwala songs could be sung only at the time of the ceremony which lasted about one month. Before the inqwala was announced, and after it had been declared closed, no one could sing inqwala songs on pain of death. The ceremony was abandoned so long ago that most of the songs are forgotten, and the meanings of the fragments which are remembered are not at all clear. In this selection the third song refers to the invasion by the Ngoni of the Bemba country, and the fourth to the village of the father of Zwangenda6a where the inqwala was danced,

(1) Ngoni:

Nang' ozonda inkosi Awumbonanga Umubonile Zi Zi.

English:

He comes the one who hates the chief.

Did you not see him?

You have seen him.

(2) Ngoni:

O ho ho

O ho ho

Wen'abakwalayo

O zi ya

Bayamyoyisa

Ukumungongoma

Untamo lukhuni.

English:

You who are rejected

They are carrying him lightly
To thrash him

He, the stiff necked one.

(3) Ngoni:

Oho ho ho

Sadabula sathini?

Oho ho ho

Ilizwe kuMangwe

O ho ho

Sadabula sathini?

O ho ho

UZwangendaba inkosi.

English:

How did we break away?

The country of the Mangwe.

How did we break away?

Zwangenda6a the chief.

(4) Ngoni:

Kangitshel' uWadana na?

Henyi, henyi, henyi, i.

Wadana

Inkosi ikithi eLangeni

Ihenyi, henyi, henyi, i.

Mayi baba.

Namuhla udanile

Elangeni kithi kwamkhulu

Zenyi, zenyi, i.

English:

Let me tell Wadana
Hey, hey, Wadana
The chief is at our home at eLangeni.
Alas! my father
Today you are bereaved
At eLangeni our great home.

B. Praise songs.

Praise songs of chiefs and great men are so well known in South Africa that it is unnecessary to explain them at length here. In Nyasaland the Ngoni are unique in possessing praise songs, some of which go back seven or eight generations. These praise songs are today "chanted" on state occasions before the chiefs, and the tradition persists of handing them on. The *izibongo*, or praise songs proper, belong to a group of songs which have no music but which are "chanted" in a kind of recitative, which only a few people know how to do. Other songs in this group are the *izithokozo* or thanking names, and the *izigiyo* which the warrior shouts when coming forward in his own solo dance during the *umgubo* dance. All people who have any claim to distinction possess *izithokozo* and *izigiyo*, but the *izibongo* appear to be only for chiefs of the royal house and a few other distinguished nobles whose houses in the past were near to, if not actually, royalty.

There are certain features in these praise songs to which it is worth calling attention in order to make comparisons with the similar group of songs in the south. In the first place, the phrasing and the words of the praise songs of the line of Paramount Chiefs vary in different districts. In Mwambera's country for example, one "pattern" of praise song is heard in Ekwendeni, another in Elangeni, in each the pattern being standardised unless a very brilliant umbongi or praiser added a phrase from his own isifua. In the second place sarcastic or even insulting remarks are sometimes found in praise songs. I am told they were permitted because no one could possibly believe them, "that is, it was a form of high praise to say ludicrous things about a chief which could not be true. In the third place, some of the praise songs were "telescoped," praises of an earlier chief being included in those of a later one. As however this is the first time any of these praises have been recorded in writing, this "telescoping" may be a fault of the recorder.

I am including here four sets of praise songs, in three of which there are alternative forms. It is interesting to see what a degree of

variation was reached, and it may be possible in comparison with praise songs in the south to find out some principles of composition of these praise songs with their variations. It may be on the other hand that "the spirit bloweth where it listeth," and isifua must have its way, and eloquence its own poetic licence.

The arrangement of the sentences will be familiar to anyone who has listened to praise songs. The beginning of each sentence (marked with a capital letter) is on a high note, generally rallentando, and the notes descend to the end of the sentence, and are held again on the last note.

(1) Ngoni: "Izibongo zikaNgwana27 kaGoqweni"

Eayethe Baba!

Eayethe Nkosi!

Bayethe Gumethe!

Inkosi yelizwe lonke

Wena umzukhulu kaNgwana, kaGoqweni

Wena kaSongobe zamakhanda, kuyambatha amashoba ezinyamazana.

Wena wadabuka kwaShaka ebenkundla zitha, amachamani ngesidaba soluthuli.²⁸

Wena wakwaMdladla uBanjwa, obanjwa ngaMasokani.

Umzukhulu kaNaNqongwane29 kaGoqweni.

Wena okwenda okumnyama.

Wena osilo sabantu.

Wena ingudlangudla30 inkunzi yamalanga.

Owaphuza ubende lwezinkomo.

Owabekwa ndawonye nezintaba.

Liyasha, liyasha ungenampendulo.

English: "Praise of Ngwana son of Goqweni."

Hail father!
Hail Chief!
Hail Gumethe!

²⁷ uNgwana was leader of the Maseko group of Ngoni when they left the South. He is the great-great grandfather of the present Paramount Gomani.

²⁸ The meaning of this phrase is very obscure and is just a guess.

²⁹ Na is the honorific prefix for important women in Gomani's country, taken from Chewa.

²⁰ This is obscure too but the meaning is said to be "grazing,"

Chief of the whole country.

You the grandchild of Ngwana son of Goqweni.

You the son of Songobe of the military villages, clothed with armlets of wild animals.

You who came from among Shaka's people. Shaka who was the milking place of his enemies, the calf skin for the kilt of Lutuli.

You of the Mdladla who was captured, who was captured of Masokana.

The grandchild of Na-Nqongwane daughter of Goqweni.

You whose marriage had sad omens.

You the wild beast of the people.

You the biggest of all other bulls.

You who drink the blood of cattle.

You who wast placed together with the mountains.

The sun is blazing, is blazing, and you do not answer.

(2) Ngoni: "Izibongo kaNgwana, kaGoqweni noGoqweni."

Wena owajub' imithi wajub' imiyomo31

Wena ontethe vuyana wahlom' izinsiba zezintethe.

Owaya phansi wakhwela phezulu, wayokuthabath' inkwenkwezi yokusa.

Hamba wena lokhu bakwalakho, uyokuthabatha amashoba ezinyamazana: ezinkomo anombeyebeye.32

Wena ukumbuyana umyandana wakadeni.

Kuyehla wayehla ndawonye nezintaba.

Wena wasel' ubende33 bezinkomo.

Wena waqhamukana naboShaka, uShaka kaMbelebele.

Wena waqhamukana naboNyathi ekaMashobane: eladuma lasibekela.

Izinkomo ezapheya ngamaganyazana.

Wena wadabukana34 naboMzilikazi

Wena wadabukana naboMpakana kaLidonga

Wena wadabukana naboNdwandwa.

³¹ Probably imiyomo yempi = advance guard of the army.

³² Armlets of cattle would involve taking cattle, someone's property, and would cause dispute. Wild animals no one can lay claim to.

³³ Ubende is really cooked blood, but I am told that it is used here poetically for uncooked blood igazi.

⁸⁴ I am not sure whether ukudabuka is used here in its meaning of "to originate" or "to break away." Either is common usage.

English: "Praises of Ngwana son of Goqweni and of Goqweni."

You who cut the trees and who cut the mouths.

You the locust, the grasshopper who fixed in your hair the feathers of the locust.

Who went below, and climbed up, and went to bring the morning star of the dawn.

You go, since you are rejected; you go and bring the armlets of wild animals; those of cattle will be much disputed.

You who remember the fault of long ago.

In descending, you descend together with the mountains.

You who drank the blood of cattle.

You who separated from the people of Shaka, Shaka of M6ele6ele kraal.

You who separated from the people of Nyathi the son of Masho6ane; it thundered, it was cloudy.

Thou resemblest cattle which were finished by wolves.

You who originated with the people of Mzilikazi.

You who originated with the people of Mpakana son of Lidonga.

You who originated with the people of Ndwandwa.

(3) Ngoni: "Izibongo zikaGomani kaTshikusi."

Bayeth' nkosi

Wena umzukulana kaGwaya Wena umzukulana kaNgwana Umabanda tshembuzi tshenkomo tshinombalo Wena owadla muntu lapha kuboNgala.

English: "Praises of Gomani35 son of Tshikusi."

Hail Chief

You the grandchild of Gwaya

You the grandchild of Ngwana

One who carries a goatskin shield, because he knows a shield of cow skin brings envy³⁶

You who ate a man there among the Ngala people.

²⁵ This was the father of the present Paramount Gomani.

³⁶ In dividing a cowskin for making shields a more honoured person receives the right hand side. Hence disputes arose when chiefs gave skins for shields A goat skin is not divided.

(3) Ngoni: "Izibongo zikaZwangendaba37 kaHlatshwayo."

UZwangendaßa omnyama ngaßomu ophik' eziyakhanya Obej' amehlo wabej' imiyomo Ophuz' ingazi zamanye madoda Indima azilingani naßakwazi kulima Ivila elidl' amaßele okulinyelwa UMcethuli wezigodo nasekhaya uyacethula nakubafo uyacethula Owel' UZembezi ngezinyawo Bath' UZembezi aluwelwa luwelwa ngezinkonjane zimadada

Ohlangane ngengwe emahlabeyeni
Wathi inospe izongiyamuyeya kanti inospe izith' ezinye

Wathi ingwe izongiyamuyeya kanti ingwe izith' ezinye Nango, nango, umbonaphi?

Umbon' emagumeni abonina.

English: Praises of Zwangenda6a son of Hlatshwayo.

Zwangenda6a whose intention it is to be black, whose wings are shining

Red as to the eyes⁸⁸ and red as to the lips.

Who drinks the blood of the other men.

The plots (which he hoes) are not equal to those of the people who know how to hoe.

An idle man who eats grain which is hoed for him.

Clearer of the stumps (which are in his way); at home he is clearing them³⁹, and in the enemy country.

Who crossed the Zambezi by foot.

They say the Zambezi is not crossed, it is crossed by swallows like ducks.

Who has encountered a leopard on his left side⁴⁰.

He said: the leopard will help me; whereas the leopard is some enemies⁴¹.

There he is, there he is, where do you see him? You see him in the fences of his mothers.

⁸⁷ Leader of the Jere group when leaving the south. Great grandfather of the present Paramount Mwambera.

^{**} He was said to have blazing eyes like a man who smokes hemp.

⁸⁰ Refers to his way of getting rid of rivals and those suspected of witchcraft

⁴⁰ The vulnerable side.

⁴¹ A possible reference to Basa who killed Zwangendaba's wives.

(4) Ngoni: "Izibongo zikaZwangendaba kaHlatshwayo."

U Zwangendaba omnyama ngabomu ophike kwakhanya.

Muka simuke wena owaliwayo.

SingaNtungwa siyishashazi lapha abantu bafa ngokhuluphaya.

Ngqaba dlan' abantu shiy' izinkomo.

Ngqaba kuLushwana kwaba uluthuli.

Nango, nango bambonaphi? Bambon' emagumeni abonina.

Mathukuthela zaluke namathole.

Iqili elikhulu eleqa amaseko ezinyanga.

Ngenyuko ngaza ngazazu ulubombo.

Siyenzwa ngenkani inkulu yaManqumayo.

Uyabona amalembe akuhlalele amalembe angalembel' ukulinywa.

Wakubon' inkotha wadladlama.

Wakubon' udonga wafaka unyawo.

Yena owashaya amanzi ngomshiza kuZembezi.

Owakhumbul' inkomo zabalunjana.

English: "Praises of Zwangenda6a son of Hlatshwayo."

Zwangenda6a whose intention it is to be black42 who denies it to be light.

Go away, let us go, you the rejected one.

We are like a man of the Ntungwa⁴³, a fat one; there the people die as fat ones.

Ngqaba you must eat people. Leave the cattle.

Ngqa6a son of Lushwana there was confusion.

There he is, there he is, where do they see him? They see him in the fences of his mothers.

One who is angry because the cattle have gone with the calves. His great cunning overcomes the magic stones of the doctors.

I have gone away until I have seen Lubombo Mountains.44
We are suffering on account of the great dispute with the
Nqumaya45 people.

You are seeing the hoes which are waiting for you, the hoes which cannot be used for hoeing.

He saw it, the short grass, he was biting it hastily.

⁴² This may be a reference to the well-known black skin of the Jeris, sometimes jeered at by certain lighter skinned families.

⁴³ Considered to be a superior people.

⁴⁴ Meaning quite obscure uLubombo (= Lubombo Mts.) is said to be fontanel

⁴⁵ Zwidi Nqumayo was Paramount Chief of the Ndwandwe; even the Jeres were under him.

He saw it, the ditch, his foot slipped into it. He who divided the water with a stick at the Zambezi. He who remembered the cattle of the Balunjana.

(5) "Ngoni: Izibongo zikaHlatshwayo46 kaMagangatha"

UGubazi ngokwambath' ingubo enzima

Umanunk' onjengokaLongqola

Umkhulana ngokubiz' ezizweni
'Sandla saphath' inkomo zaphalala

EzikaNdlembe ngezikaNdlembe wakuboMfekane

Eathi ubuhlalu kabulingani entanyeni

Ingani kobodade babo buyalingana

English: "Praises of Hlatshwayo son of Magangata."

Gubazi by putting on a black robe
Who smells like the son of Longqola
Who is great by calling the tribes
The hand that touched cattle and they multiplied
Those (cattle) of Ndlembe, they belong to Ndlembe of Mfekane
They say the beads do not fit on his neck
Whereas on the necks of his sisters they are fitting.

(6) Ngoni: "Izibongo zikaHlatshwayo kaMagangatha."

UHlatshwayo omfishane anganyatheli ingubo
Ingani abade bayazinyathela
Inyama idliwa ngemikwa yamazembe
Ingadliwa ngezinsungulo ibolile
Hlatshwayo isihlahla esibenyana kuHlatshwayo waMandulo
Utshani wentongoza awushi nokusha, usha nyasisitheka usha
using' intonteya.

English: "Praises of Hlatshwayo son of Magangata."

Hlatshwayo the dwarf one⁴⁷ who cannot trail his cloth
Whereas the tall people trail their cloths
Meat eaten with knives of axes
If it is not eaten with forks it is rotten
Hlatshwayo whose bodily vigour is finished off compared
with Hlatshwayo of former times⁴⁸
Grass of deep red colour is not burned with burning; it

burns very slowly; it burns drop by drop.

46 Was father of Zwangenda6a.

⁴⁷ He was known to have been a dwarf.

⁴⁸ A reference to his alleged impotence.

C. War songs:

To the Ngoni war was man's work. Throughout their history as a separate people they were a nation under arms, and on the success of their arms depended their existence as conquerors. Their life was organised in every detail to make them efficient as warriors, and in the preparations for war, songs and dances played an essential part. There was one group of war songs, imigubo, sung before going out to fight, another, imihubo, sung on the return from the war. The imigubo are danced today in Gomani's country in full war dress with shields and spears, and only in the Paramount's village, the place of mobilisation of the army in old days. The Ngoni women join in the dance, some inside the circle of men, some outside, and the tempo of the dance works up and up as it did in old days to inspire men with the lust of battle.

It is in the group of war songs that I have found those which are common both to Gomani's and to Mwambera's country, and which therefore point to a common source in the south. Though the songs appear brief in their wording, much of the tune is sung to "sounds" such as inyo ho, zi, oya ye yayo, and the accompaniment is varied with stamping the feet and knocking the shields either with spears or against the knees.

The following five songs are those common to both Ngoni areas. The next five songs (6 to 10) are selected as typical of this group of songs.

(1) Ngoni:

Ay' inkosi yadinga ngomkhonto Mbayekeyani na? Hay' inkosi yadinga yomkhonto Mbayekeyani na?

English: No chief can be poor because of the spear⁴⁹

Then why are you running away?

(2) Ngoni:

Uyezwa?
 Umngoni uvela enzansi⁵⁰
Uyezwa?
 Uyezwa zi
Zi.

⁴⁰ A reference to the probable loss of warriors in the coming fight.

⁵⁰ Alternative reading: Lomngoni owaye enzansi.

English:

Do you hear?

The Ngoni comes from the south-east.

(3) Ngoni:

Alternative version:

Inkomo yami na Ye Somfuya May' inkomo yami na E kuboNdleya

Inkomo yami na Ye Somfuya Wadl' inkomo zabayeka Ye ye Somfuya.

Owadl' inkomo zabayeka

English:

Is it my beast?
Yes Somfuya

He ate the cattle. They ran away.

(4) Ngoni:

Alternative version:

I i i Sißangani? Sißangani? Njenje phezulu?

Kubangwani? Ho Kubangwani? Ho

I i i

Kubangw' ilang' eliphezulu Ho vova

Oyi oyi oyi! Lilanga liyashona Inyo inyo inyo i
Hoyawonje liyashona
A ho a ho

I i i
Sibangani?

Kubangwani?
Kubangwani?

Sibangani?
Njenje phezulu?
I i i

Kubangw' ilang' eliphezulu.

Oyi oyi oyi!

English:

What are we contending for?
In this way in the sky
'The sun is setting.

What is contended for ?
For the sun is in the sky
It is setting.

(5) Ngoni:

O may' inkosi zi ha ho O sibangel' inkosi yethu nje.

English:

O alas I the chief We fight for our chief, only that.

(6) Ngoni:

Ngagoba ngagoba ngigobele UZwidi
Kunjani-nje, Kunjani-nje?
Ngibengigobel' UZwidi kaLanga
Inyo i inyo i
Kunjani nje, kunjani nje?
Ngibengijiyel' ukulala
Inyo i inyo i
Kunjani-nje, kunjani-nje?
Izidikalala zemizi yabo
Inyo i inyo i
Kunjani-nje, kunjani-nje?

Manxeba emikhonto

Enyi i enyi i Kunjani nje kunjani nje?

English:

I have waited, I have waited, I am waiting for Zwidi.

How? just how?

I have been waiting for Zwidi son of Langa.

I have been longing to sleep.

The tremendous size of their villages⁵¹.

The wounds of the spears.

(7) Ngoni:

Eayakhuluma bayakhuluma
Izwe lonke
Muyezwa muthule muthi du
Eayakhuluma
Kuyakhulunywa kuyakhulunywa
Izwe lonke
Longiyeka uhlale uthi du
Kuyakhulunywa bantu.52

English:

They are talking they are talking
Throughout the land
Listen keep silent be still
They are talking

⁵¹ Isidakalala is a very big village with many ixigawa or hamlets contained in it.
52 This is one of best known songs in Mwambera's country. The tune is used as a hymn tune, as are also many others.

It will be spoken it will be spoken
Throughout the land
Longiyeka you keep silent you be still
People are being talked about.

(8) Ngoni:

Zemuka inkomo magwala-ndini
Naziya zemuka magwala-ndini
Inkomana zemuka na? zemuka magwala-ndini
Ubujaha buphelile na, zemuka hi ha o ho
Nihlala nemijingathi zemuka e he he
Hayi nkomo zemuka na zemuka hi ho
Nilibele namabele, zemuka o ho ho.58

English:

The cattle run away, you cowards.

Those yonder; they run, you cowards.

The cattle, see, do they run? They run, you cowards.

Is your young manhood over? They run,

You are left with the carriers. They run,

Look the cattle run, they run,

You have eyes only for the food stuffs. They run.

(9) Ngoni:

Asazi asazi
Asazi asazi ezweni lomfo
Asazi thina.
Ingani uyazishuka?
Asazi thina.
Ulibele uyazishuka
Ulibele uyazishuka ezweni lomfo
Asazi thina.

English:

We do not know

We do not know in the land of the serfs

We do not know, we ourselves

Why do you trouble yourself?

You are troubled for nothing

You are troubled for nothing in the land of the serfs,

We do not know even we.

⁵⁵ This is a war song sung by women, deriding the men to do great deeds.

They would see herds of cattle being driven away hastily in villages passed on the march, and would sing this song to persuade the army to go after them.

(10) Ngoni:

Hayo hayo hayo
Thina siyanda lizwe
Elele zi a ho
Siyabuya kuneBonga
O uhlaya uMaphikenkani⁵⁴
Sabuya kuneBonga
O kusale amaphik' inkani⁵⁴
Elele zi a ho.

English:

We follow the country
We are returning from Bonga
You remain you do not yield
We have returned from Bonga
There remain those who have not yielded.

D. Ingoma songs:

Ingoma means just song or dance but is used for a kind of dance which is distinct from other dances. When the Ngoni say "We are going to dance ingoma" it may be to end a mourning period, to celebrate a good harvest, to make merry over beer, or to compete between villages in dancing, or for many other reasons. Some songs of ingoma are old, others modern, and most refer to some incident which has happened either in the remote or immediate past, and which is enshrined in a song to keep its memory green. Ingoma is danced by the men without weapons, that is without spears and shields, but with knobkerries, small axes, sticks, or tails of animals in their hands. The women hold spears in their hands upside down, grasping the blade, or long sticks. To anyone who has listened for some time to Ngoni music, there is a big difference between the rhythm and tempo of ingoma songs and war songs. The former were songs of civil lite, the latter of wartime, and the ingoma songs have a leisurely rhythm and work up less to crescendos than the war songs.

The following selection of four songs are fairly typical of *ingoma* songs, each referring to some event.

(1) Ngoni:

Se ngaz' onela Kushona kweyanga

⁵⁴ Used by warriors to express their determination to die rather than yield to the enemy.

Sengizakuyona mina Yo mntaka \(\lambda\) dunduma Hayi yi yo yo (repeat).\(^{56}\)

English:

I have brought shame on my name
At the setting of the sun.
I shall bring shame on my name, even I
Woe is me, the son of Ndunduma.

(2) Ngoni:

Siyakutheth' izulu yeyahe
Egodleni siyababaza.
Satheth' izulu yeyahe
Egodleni
Ku Shimtunga yeyahe
KuMabalawo yeyahe
Kuyababazwa.

English:

We shall pray for rain
At Egodleni we are praising.
We did pray for rain
At Egodleni
At Shimtunga's
At Mabulawo's
Praises are being spoken.

(3) Ngoni:

Ilizwe liyahlokoma Ntabeni⁵⁸
Ho UKamiya⁵⁷
Ilizwe liyahlokoma Ntabeni
Ho UKamiya
Benza ngabomu
Benza ngabomu
Ho UKamiya
Ha stlibonile
Ho UKamiya,

This is a song in praise of Nyumbane Chibambo (brother of Yesaya Mlonyeni Chibambo) who was such a famous dancer that others were put to shame before him.

⁵⁶ This is one of the most popular songs in Gomanis' country.

⁶⁷ UKamiya and UNtabeni are people whose identity is now forgotten.

English:

The country is singing to Ntabeni They are doing it with intent We saw it (the country.⁵⁸)

(4) Ngoni:

USomfuya
hi a ho (repeat)
Udabula lizwe
ho ya ho
USomfuya.

English:

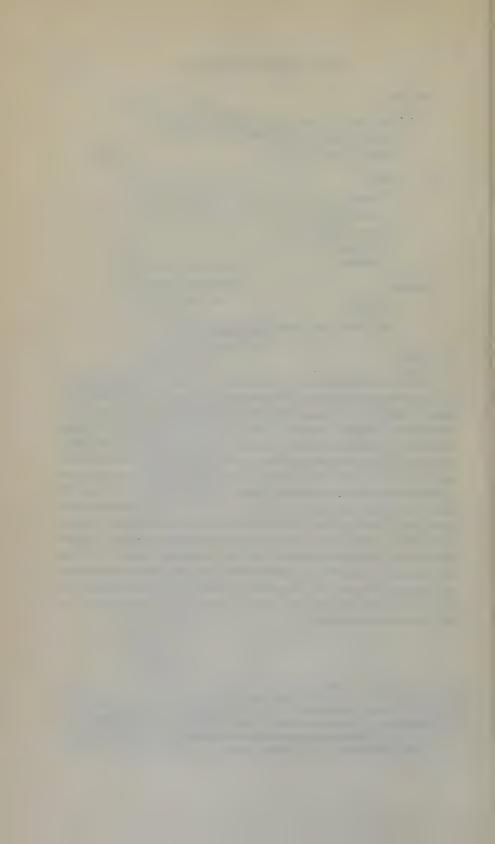
Somfuya He breaks the country.⁵⁹

Conclusion:

This small collection of songs, recorded only in words, is like a skeleton compared with the full beauty of the human form. It is their music which clothes them with form and life, and it is music of a quality that deserves recording and studying as an aspect of African music by the Western trained musician. Here and there missionaries have taken Ngoni songs as hymns or as songs in schools, but that is rare. and the music is still "of the people" untouched by Western influences. It should be evident from this collection that Ngoni music is of the stuff that life is made of, reminding them of crying babies and jealous women as well as of heroism and philosophy, ranging from the plaintive melody of the igubu to the stately rolling harmonies of the ingoma. Gramophones with music-hall tunes and modern jazz are rare as yet here, and not popular except with the sophisticated few. The natural expression of the people in joy and in sorrow is their own music, and it is as a mirror of their life, of today as of the past, that I hope it may one day be recorded adequately.

⁵⁰ UKamiya and UNtabeni are people whose identity is now forgotten.

⁵⁰ Used of someone leaving a big chief and going away with his followers to found a new chieftsinship.



SOME REFLECTIONS ON BEMBA GEOMETRIC DECORATIVE ART

By VERNON BRELSFORD

PART I

AS A PHASE OF ART EVOLUTION

The late Roger Fry, the famous English art critic, often asserted that primitive art had its origins in the aesthetic impulse and did not wholly owe its inspiration to sympathetic magic or other objective considerations. Some anthropologists would dispute an early development of this impulse and its connection with the first crude prehistoric decorations, but in the present day drawings of the Bemba people of North Eastern Rhodesia we can trace characteristics of both magical and purely aesthetic art. This blend of the two impulses may be typical of much primitive art.

It may seem fantastic to quote Plato in connection with Bantu art, but in Philebus we find him stating the dialectic of geometric art, the kind of art that was typical not only of early Greek decoration but is characteristic of a certain phase of primitive graphic art of all ages and races. Socrates says, "What I now call beauty of form is not what most people imagine, namely the form of living creatures, or pictures but rather straight lines and curves, forms such as are made by instruments which construct circles and globes by rulers and squares which make rectangles, if you understand. For I mean that these are not relatively beautiful, like other things, but are always beautiful in themselves and produce pleasures peculiar to them and not depend on previous irritation."

The historical significance of this dialectic is intensified when it is realised that in many phases of modern abstract art a return is made to illustration based on geometric forms. In a very sensitive age the artist has turned away from aesthetic formalism, and there has been a tendency to "begin all over again" and to "reconstruct art from elementary constituents." In primitive art, prehistoric art and often in the reproductions of children there are factors displaying an "immediate directness" of expression developed either from the contemplation of geometric linear forms or of naturalistic phenomena. Thus it is that the forms and designs of all primitive art have a common basis of discussion,

This geometric stage in the evolution of art, with its linear and two dimensional forms; the art of lines and outlines whether seen in present day Bantu villages or in the rock engravings of prehistory needs to be placed in its proper perspective. Indigenous Native art is rarely an isolated phenomenon; the comparative method must be used before the value of any phrase of primitive culture can be assessed. So the decorative motifs of Bantu art both in details and in style prove to be not unique but to be typical of a stage evolution.

The lines, diamonds and curves decorating Bantu water pots might have been copied from the potsherds of prehistoric Europe; ¹ stylised drawings of men and animals on Bantu huts can be compared with 6th Cent. B.C. Illyrian illustrations. Archeological research is proving the futility of claiming an esoteric or endemic development for art forms, for direct naive apprehension of real and artistic relations is a common trait of primitive mind. This is not the place to discuss the validity of an alternative diffusional theory, but art designs and forms do tend to fall into horizontal evolutionary streams rather than into vertical national compartments. The Greek carvings of the 7th Century B.C. have a Negroid appearance both in detail and in stiffness of style; ² the combs of the 4th Century B.C. Scythian culture are the prototype of the long combs in daily use in Central Africa to-day; and the coloured squares and triangles of Barotse coloured bead work can be paralleled in the mats of ancient Peru,

So the designs reproduced here fall naturally into the class indicated. As Bemba drawings some of them have certain connotations, but as designs they belong to a primitive stage of art with no tribal signature. I have indicated the nature of geometric art; the other characteristics of primitive art which might apply to some of the designs shown I do not wish to discuss here. Such subjects as disproportion, emphasis of essentials, distortion of planes, expressionism and the drawing of non-visual elements are all important elements of such art but they demand a separate treatment.

All the designs illustrated have been copied from the external walls of Bemba huts: they are typical, and many variations on the themes described may be seen. The colours used are black or ochre on white, or white on brown. The colours themselves are obtained from clays, wood ash and charcoal. It was not considered necessary to indicate colours on the reproductions.

¹See Man 1935, 25 for some typical Palaeolithic and Bronze Age ornamental motifs that can be compared to Bantu decorative lines,

²M. Zervos, 'L'Art en Grece'. 1934.

PART II

DESIGNS WITH A NON-AESTHETIC INSPIRATION

Figures 1 and 2 are examples of those common designs of lines and dots which represent *Mupeto*. Figure 1 is rather more elaborate than the normal which, like Figure 2, is usually a square or oblong divided by an arbitrary arrangement of lines with spaces filled with dots.

The Mupeto is a mystic obstacle³ made by the mistress of the puberty rites (Nina chimbusa) which has to be jumped over by the initiate (Nachisungu). Inside the initiation hut a frame is made of a branch bent into a circle with its ends fastened into the ground, and then another branch bent over it at right angles. This framework is then plastered with clay and studded with seeds of marrow and pumpkin. The general idea of this obstacle is often used as a decorative design. In Fig. 1 the marks on the top row of the design are probably representations of the tribal cicatrisation marks (lubemba) which are made on the face, back and stomachs of individuals, generally women.

The birds and animals of Figs. 1 and 4, as well as many other representations of animals, are called *Mbusa*. This word is used in two connotations. Firstly it is the name given to the clay figures and paintings that are made on the interior walls of the initiation hut, and may refer to animals, stylised designs or symbols. At stages in the puberty rites these objects are pointed out and their meaning expounded (*Kulange mbusa*). Secondly it may refer to a painting of a bird or animal that is shot at by a prospective bridegroom in order, so the popular explanation runs, that by his marksmanship he may display his ability to protect his bride.⁴

This same shooting ceremony with bow and arrow is still often performed at the puberty rites should two of the initiates be betrothed. (It is customary at these and the following rites for youths to be present only if they are betrothed to one of the girl initiates.) The shooting rite is a symbolical ceremony, the girl crouching beneath a round mark, obviously symbolising the female organ, made on the wall whilst the youth shoots his arrow into it. Figure 3 shows a decorative design based on this performance. The round mark is combined with a very stylised drawing representing a buck and a snake.

In the same category are many variations in the style of Fig. 4 which depicts the actual shooting of the mbusa. The zig-zag line running

⁸In this connotation. It may also mean a wheel, hoop or arch,

A custom that is gradually becoming extinct,

through the picture and continuing round the wall of the hut introduces a most effective piece of decoration. It turns what would otherwise be an unconnected daub into a proper mural design; and a disjointed illustration on a wall becomes attached to the wall itself in the same way as do the planned continuing lines of Figure 14.

Figures 5 and 6 show how instruments used in the puberty rites are often drawn as isolated decorative designs. The object shown in Figure 5 is known as mundu. It is fashioned of clay and has openings in the hollow round body as well as in the hollow stem. At one stage in the proceedings a youth blows through a hole in the round portion and a girl at the same time blows through a hole in the stem. From other holes in the stem comes a sound described as the roaring of a lion. As this instrument is being used the onlookers sing a song the words of which run, Makubi muchitungu pali uko mundu asumine inama. Freely translated it means, "The vultures are over the island where the lion has his kill." The popular explanation of these words is that now the girl has passed through the chisungu rites she is free to marry and the men will come flocking round her just like vultures gather round dead meat. But on detailed questioning another simile will emerge, that now the initiate is as fast caught by the laws of tribal tradition and custom as is game seized by the claws of the lion.

Figure 6 shows a design based on the shape of another esoteric instrument made of clay. It is a knifelike object. The mistress of the ceremonies flourishes it and threatens a prostrate female initiate whilst she chants a song beginning Banga mulilo napya. . . , the onlookers clapping and dancing in accompaniment. The object and the drawings of it both take their name from the song and are known as banga mulilo napya. The object of the song is to tell the initiate that she is now fit to marry a husband who will be as a burning fire to her. (Mulilo—fire; kupya—be burnt, or possibly, be mature.)

Figures 7 and 8 are also common designs based on ritual instruments. They are drawings of small clay head-dresses surmounted by a feather, the clay being studded with pumpkin seeds, which is worn b, a youth during a song entitled "Mwansa chembe..." The objects and drawings of them are known by this phrase whose origin is obscure. It may refer to the feather of the fish-eagle (chembe) which is often used on the headdress. But both head-dress and the attitudes taken by the dancer definitely have a sexual significance, as have the above-described song and instrument "Banga mulilo napya..." There is no need to dwell upon the obvious symbolism but both male and female informants are insistent upon the

fact that these two portions of the rites have the object of insisting that the girl must obey her husband in all things, and that if she does not he has the power to hurt her.

Variations on the designs illustrated are one of the most common forms of external mural decoration. Although the objects themselves are only seen during initiations the designs based on them are freely named and described in public.

Dr. Rivers in an article on "The Disappearance of Useful Arts," has tried to show how the disappearance of specialised ceremonial has in certain parts of Oceania been one of the causes leading even such utilitarian arts as those of canoe and pottery making to fall into disuse. The analogy is a useful one. The decay of the importance of the puberty rites among a certain class of Native has not only destroyed the possible universality of the use of such designs as are here described, but has also rendered many of them unintelligible to that class when they are seen. The designs, though publicly displayed, are esoteric inasmuch as their full meaning is only understood by those who have been through the rites. When discussing the mbusa in front of a mission-trained Native or one who has been brought up on the mines, the village Native often has his little joke by referring to the ignorant one as mwaiche (a very young boy). Although he may be a grown man and a pure Mubemba if he has not been through the puberty rites in the eyes of the villagers he is still a youth. The villager will freely explain the publicly displayed designs to such a mwaiche, but in such a manner as to imply that he cannot really be expected to understand what is told to him.

In the large number of villages under mission influence the practice of the puberty rites is discouraged, and it is noticeable that the place of the *mbusa* designs is taken by patterns based on the Christian cross and other symbols of religion. The desire to make use of magical and religious symbols as ornamental designs seems to be widespread.

It is not necessary to reproduce any designs obviously based on the cross, but Figure 18 is an illustration copied from the exterior wall of the village Catholic church of Chief Menga. It is a jumbled decoration based on several features of an actual church building joined together with an inconsequent incoherence. The main stem is a Christian cross standing in what may be either a flower pot or a object representing the altar. The curving lines ending in black balls are flowers, and even to these are added a few crosses. The two designs on either side of the

⁵Festacrift Tillägnad Edward Westermarck 1912.

main stem are called *Lusasa*, and are intended to be drawings of the altar rails. *Lusasa* is Chibemba and is the name of the open-work reed fences that often enclose the verandahs of huts. The likeness of an altar rail to an openwork fence has resulted in the use of the word in the former sense.

It is probable that at the present time the only Europeanised Bemba designs that can fairly be placed under this section are those owing their inspiration to Christianity. There are, of course, countless examples of decorations illustrating European objects, but their value is purely aesthetic and decorative.

PART III

DESIGNS WITH A PURELY AESTHETIC INSPIRATION

In one sense it is possible to assert that even the designs described in the above section owe their decorative qualities to the purely artistic urge, since their esoteric value is lost when reproduced on the outer walls of huts. Roger Fry's argument was that if the "Bushman" merely wanted to indicate an antelope with a spear through it, so that by sympathetic magic his spear would kill a real buck, the drawer would have been content to make some simple symbols and need not have troubled to shade, colour and try to represent the real animal as he often did. In his animal and human drawing at least he must have had the artistic desire for the expression of something more than mere symbols. The Mipeto and Mbusa have symbolical values but their transference from the inside of the initiation hut to be themes for external decoration argues the possession by some Bemba of an aesthetic gift.

That mural decoration has on the whole left the lowest stage of all can be instanced in Fig. 4, and also in many more examples showing how certain focal points such as doors and windows are used as the bases of design. The unconnected daub is still the rule but in Figs. 9-13 are illustrations of how structural elements are embodied in ornamentation. Symmetry does not appear to be either an essential or a virtue in such designs. The idea of balancing two identical patterns, which ought through its apparent simplicity, to be an early characteristic of such art, occurs but rarely. Figs. 9-11 demonstrate subtleties of balance that are achieved by the use of counterbalanced but differing designs: there is no lopsidedness in the decoration as a whole in spite of the varied patterns. Fig. 13 shows an obvious but uncommon balance, although the snake, as a motif is common, and is probably the inspiration of many of the curves of tropical decorative pattern.

Figs. 14 and 15 illustrate what are fairly common motifs made up of variations on the figure of the square. When questioned concerning the origin of these the invariable answer is that they represent hunting or fishing nets which can be seen hanging in every village. The single line outlines running round the design, in addition to displaying characteristic asymetrical protuberances, display possibly a primitive desire to complete the pattern. An encircling line, especially around the direct representations, is a frequent convention and emphasises the fact that the drawing is an illustration of something. Questions usually elicit the reply that it is done, in the cases shown—"to make it look like a net."

Although the designs of Figs. 16 and 17 are based on modern themes their treatment brings them into the sphere of geometric art. Fig. 16 shows a man on a bicycle and Fig. 17 is a composite design of a stylised letter T over an animal, with a curl derived from the letter H at the side.

The designs illustrated are typical and representative but even to one acquainted with the tribe it would be difficult to distinguish these pure designs from those of many other tribes in North-eastern Rhodesia, so representative are they of a certain stage of Bantu culture. But are they then typical enough to be utilised as bases for other Bemba cultural conclusions?

PART IV

THE RELATIONSHIP OF ART AND TRIBAL CULTURE

In part 1 I discussed the generally accepted view of primitive art, (therefore Bantu art) as not displaying the characteristics of an isolated cultural phenomenon, but rather as representing a stage in the evolution of Art as a universal human desire, a desire that in the realm of form and design often travels the same route amongst different peoples.

From the narrower point of view attempts to relate decorative art with co-existing phases of the same culture have not been wanting. Livingstone, an early generaliser, associated Bantu art with the presence of the tsetse fly. He made a valid historical deduction that art flourishes better among settled agricultural peoples than among the more nomadic herdsman. Later attempts at finding cultural and other relationships have not been so general.

The nets usually hang on the walls of huts. It is possible to trace other designs on walls that are representations of objects that usually hang there. Such ornamentation is the most direct and realistic example of illustration.

Dr. Haddon in his study of the decorative art of New Guinea⁷ attempted to relate the condition of art to that of social organisation. From the fact that representations of animals and designs were always isolated and never joined into pictures or scenes, he asserted that this lack of co-ordination was a reflection of the general lack of social organisation in the districts concerned. Wissler⁸ claimed the occurrence among the North American Indians of "design areas," and found that the areas where decorative art was the most developed or showed the effects of external influence also proved to be "centres of specialisation in industrial art." Bartlett⁹ in stating that "reduplication" is the most common mode of artistic elaboration at the primitive level claims that this is typical of the tendency to repetition and imitative traits of primitive mentality.

In modern art criticism there is a decided attempt to relate the manifestations of one art to those of another, so that some of the conclusions in the above manner might be considered justifiable. But, for the following reasons, I do not think that Bemba decorative art of the present day can with any validity be related to other definite tribal characteristics; excepting such obvious connections of motifs and ritual as those described in Part II.

In the first place, Bemba decorative art is not purely Bemba art. The tribe has been in constant contact with Europeans for at least four decades and designs incorporating European objects are all too commonly intermixed with indigenous inspirations. Christian crosses, letters and wheels, distorted from realism in every conceivable fashion, can only with great imagination and trouble be separated from what at first seem to be purely Native designs. External influence has been at work too long for any inferences apposite to Bemba culture to be drawn from Bemba decorative art.

Secondly, it is doubted if Bemba art, even subtracting obvious foreign influences, is individual or typical enough to warrant any generalisations. Many observers have remarked that the tribe is remarkable for its lack of the usual skill in Bantu craftmanship and decorative ability. Its history is a sufficent explanation of this gap. Until the advent of European control the Bemba were a raiding tribe that lived by plundering its neighbours. Thus, although it lives in tsetse infested country, it is an exception to Livingstone's generalisation, for as a warlike tribe it bothered neither about agriculture nor trade. Nor has art flourished;

Royal Irish Academy, Cunningham Memoirs No. X.

The American Indian.

Psychology and Primitive Culture,

war again has given it a strong political organisation as its outstanding cultural gift.

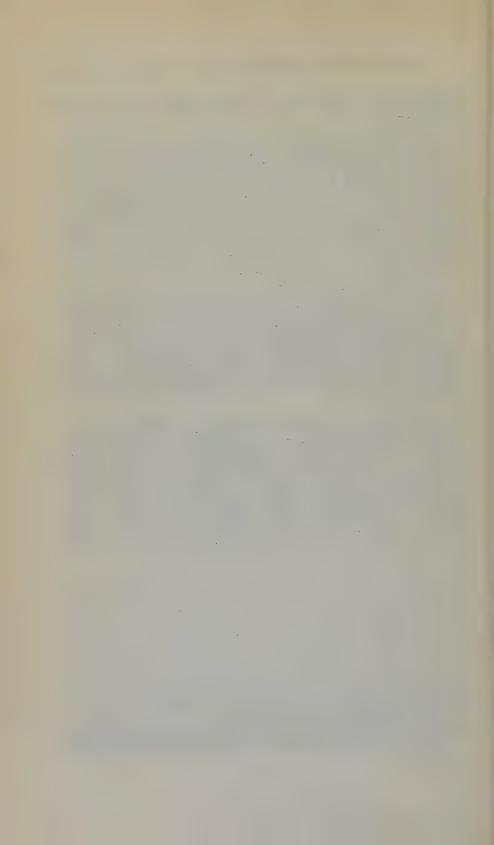
Thirdly, Bemba art has not that intimate connection with folklore, tradition and Native custom as is the case in many other primitive tribes. For example, the amazing geometric designs of *Malekula* are a key to a wealth of tribal lore: 10 North American pictographs and Mayan heiroglyphics display a conscious conventionalisation of knowledge both of natural lore and religious ideas. Among the Bemba the *Mbusa* and *Mipeto* are the only decorative motifs that give a clue to another phase of tribal life, and that to such a small phase that it cannot compare with the examples quoted.

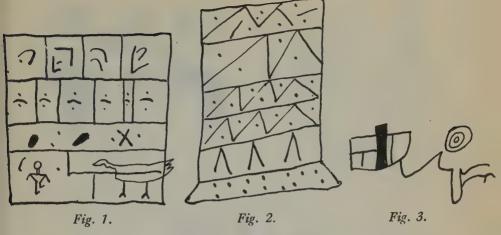
Lastly, Bemba decorative design is of too ephemeral a type to be of historical value. And for art to be a key to any other tribal characteristic it must be durable enough, either to be placed within a definite tribal date before the advent of foreign influence, or be sufficiently large and continuous to form a body of historical reference. Patterns on the walls of huts that are destroyed after only two or three years of use cannot, as can decorative iron work or woodwork, be placed into any continuous corpus of tribal or art history.

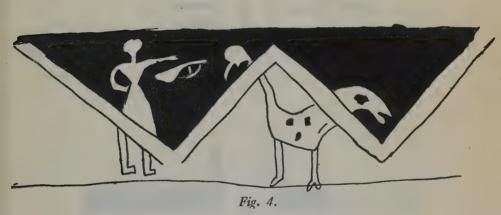
We are left then with the final conclusion that Bemba decorative motifs of the present day are only of cultural value as examples of a first stage in an art that might grow. To keep a record of the changing motifs of ornamentation might well prove a key to the growing sensibility and sensitiveness of a tribe passing from primitiveness to sophistication. Possibly much esoteric ornamentation has been forgotten and it will be interesting to see how much of what is left retains its usage and meaning: to see how long before the urge to beautify ceases to be expressed in lines and curves and is satisfied with pictures and scenes.¹¹

¹⁰Geometrical Drawings from Malekula by A. Bernard Deacon. In Journal of Royal Anthropological Institute Jan-June 1934.

¹¹Already in some of the larger township compounds the painter of realistic wall pictures i.e. of human beings, animals, motor cars, etc., is in constant employment,







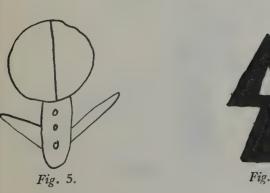






Fig. 7.



Fig. 8.



Fig. 9.

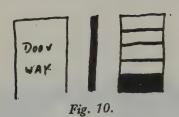




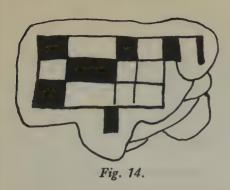
Fig. 11.

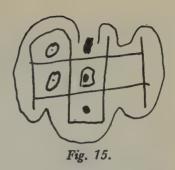


Fig. 12.

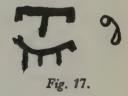


Fig. 13.

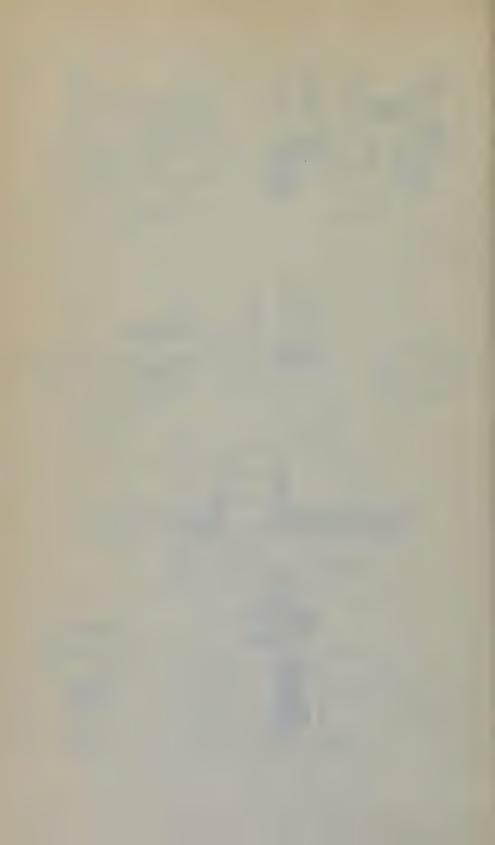












MARGINAL NOTES TO WIKAR'S JOURNAL (VAN RIEBEECK SOCIETY XV, 1935)

By H. D. ANDERS

The 15th volume published by the Van Riebeeck Society, itself an important publication, has already been ably reviewed in the March number of the Bantu Studies (vol. X). The little I wish to add is in the nature of unconventional notes on the linguistic side, in which I am particularly interested.

- (i) p. 20: Eynikkoa, the River folk on certain islands of the lower Orange River. Dr. Engelbrecht (225) remarks that this collective name has survived to this day and there is still an occasional Kora who has vague reminiscences of the /2ei-//2eina. It is worthy of note, as Professor Mainguard points out Bantu Studies, u.s., 37), that from the time of Van der Stel downwards the Orange River came to be known as Evn or Ein. Now, it seems to me that ein stands for nothing else but Bushman /k'ei (S2), (where k' denotes glottal closure), river; with which compare Dr. Bleek, Bushman Folklore (391), /k'i:, the Orange River. This has in common with Engelbrecht's /2ei, the click as well as the ejective sound, though not the nasal. Instead of //eina, which is good Nama for "people." Wikar has koa, denoting the same thing. Further, it should be carefully noted that Evn is written Tven in the Dagregister of Simon Van der Stel's journey to the North in 1685-6 (cf. Godee-Molsbergen, Reizen, I, 176). Tyen undoubtedly stands for t'eyn, the t indicating a click sound. If this is correct. Maingard's suggestion that $evn = \tilde{a}ib$, liver, is unacceptable.
- (ii) p. 24: Kakeis or Hakeis (195) is connected with $\neq \bar{a}$ - $//\chi eis$, Breë-sand. Compare Standard Nama $\neq h\bar{a}$, broad, flat; and N.//kaib, feiner Fluss-sand, or $//k\chi aes$, Kies (Schultze, 167); as well as Korana $//\chi aib$, sand (Wuras), and //kei-si, sandy (Maingard, S.A. Journal, XXXI, 131).

Compare in this connection *Kaabas* (p. 35 n) "Nama $\neq abbas$ ": Standard Nama " $\neq h\bar{a}b$ oder *hawab* die Breite, Fläche," also $\neq g\bar{a}b$, die Fläche.

(iii) p. 29. The Samgomomkoa (or Samgonomaqua in A Text), the Sandveld folk, are described as "Bushmen Hottentots." Sam undoubtedly stands for Nama San, Bushmen. Gomomkoa, one might be

tempted to think, is equivalent to goman-kwa, cattle people, just as Bliqua are the goat-folk, and Commaka Dammeras are the cattle Damas (v.R.S. VX, 315), i.e. the Hereros. But this explanation, if offered, would no doubt be rejected ab initio, since Bushmen are not cattle owners. Thus, Dr. H. Vedder surmises that the name Samgomomkoa arose from a question to Hottentots: "What people are these?" and their reply: "Saan gumo," merely San (p. 31 n.). Kroenlein, be it noted, writes gumo with a diacritic under u, which denotes very short vowel (=gomo).

However, Wikar clearly says of the said Samgomomkwa: "These do possess cattle, but only a few, and yet they do not steal; but, because they support themselves by shooting game and by what they find in the veld, they are called chaboup (N. //habu, roving people) or 'Bushmen' by the Namaqua" p. 31). Again "De Samgomomkoa en Namnykoa,—deze hebben vee, maar worden tog van de Nomacqua bosjemans genoemd." (Het Zoekligt, IV, 87). Further, Wikar mentions that they slaughtered one of their oxen, when he stayed at their kraal. Altogether, they appear to have been rather respectable people; and Ouga, one of their headmen, became Wikar's travelling companion and brother. "I must testify," says Wikar, "before God and man, that he was not only a brother, but even like a father to me."

It is clear, then, that the Samgomomkwa of Sandveld were not wild San of the low type, who led a precarious existence in mountains, scrub, and desert, but were people who had attained to a higher level of existence, lived among Hottentots, had a more or less fixed abode and owned cattle. I have no doubt they also spoke Nama. One of their headmen had a name with a Nama suffix (Ou Xa), and the other mentioned by Wikar (33, 37) was called "Gouzep or Baartman," that is bearded man (cf. N. /houb, der Knebel-oder Ziegenbart am Menschen; /hou-si, adjectivally). Regarding the San in general I would refer to Dr. Vedder's illuminating remarks in his book Das alte Süd West Afrika, 1934, pp. 120, seq. But it may be left an open question whether the Samgomomkoa were impoversihed Hottentots or whether they were respectable San-Bushmen.

(iv) p. 35: "Chabous, named Brakwater." The footnote 27 states that Chabous is the present Coboopfontein, with brackish water. But rather than connect Coboop and Chabous with ! $\chi \bar{u}b\bar{u}s$, lime, or ||khowob, grave, as the note suggests, I should prefer to compare Cobo with Nama $|\bar{u}-b|$ (with a high tone), salt, or its cognate Nama $\neq k\bar{o}-b$, salt,—and correlate it with Ookiep = $|\bar{u}-geib|$, and with Ukama which in Nama is $|\bar{u}-||gami=$ Brakwater.

¹Cf. L. Schultze, Aus Namaland, 1907, 93.

(v) p. 47: Naas or aardwolf; p. 75: nuaap, aardwolf. The editor's footnote: "Proteles cristatus, the aardwolf or maanhaar jackal. Nama $/h\bar{a}s$. An eater of ants and termites. It is a nocturnal animal. N. !noa-b=porcupine. Nuaap, p. 75, is the black aardwolf, $\neq nu-/h\bar{a}b$."

Naas and nuaap must be the same thing; while !noab, the porcupine, of course, has no connection with the aardwolf. But how to explain the difference between naas and nuaap? A comparison with the Cape Archives text will help us, for this text spells nhaas, and therefore nuaap is a textual error for nhaap. Consequently, we have to eliminate from our consideration !noab and $\neq nu-|h\bar{a}b|$. Nama |h\bar{a}s, aardwolf, so far as I know, had not been recorded before in any list of Nama words. Nor is it mentioned by Shortridge The Mammals of S.W.A., 1934. |h\bar{a}s would perfectly fit nhaas, if it had a nasal.

If $/h\bar{a}s$ is a "new" word, that is to say, not previously recorded, this should be prominently stated, also where it is current. Well known, of course, is the Nama $/g\bar{s}-b$ for aardwolf. Do $/g\bar{s}-b$ and $/h\bar{a}s$ designate the same animal? If not, what is the difference?

There are several other Nama words in volume XV of the v.R.S., which I had not seen in the word lists known to me. For example: $l\bar{a}$, the tall white grass (58 n.); $\neq abbas$, flat (35); |aris, opbly (17); $\neq gabis$, nook (35) (which also appears in the place-name on the map $Dabe-\neq gabis$, near Warmbad); !ganub(e), the wild apricot (58). And there must be a fair number of other words, both Nama and Korana, which had not been recorded until quite recently. It would be a boon to students if they were collected and published in a list or lists, supplementary to Wandres' "Nama Wörter" and Meinhof's list of Korana words in his Korana Grammar.

(vi) p. 48: Hougay (Swartmodder River). If we associate Hougay with $\neq n\bar{u}$, the nasal is conspicuous by its absence in the derivative. The copy in the Cape Archives, however, reads Hongais, which is therefore preferable to Hougay. Similarly, $\neq n\bar{u}$ retains its nasal in the appellation Kami-ngou (!gami- $\neq n\bar{u}$), the Bondelswarts.

(vii) pp. 59, 71: Haris or Garies, we are informed, is "the present Onderste Narries. /garis, kweekgras. The tributary at Narries is to-day, however, called Steekgrasrivier and Narris is perhaps derived from the

² The passage where it occurs is worth quoting, as it describes the animal: "Ook zyn deeze honden byzonder geteerd op de jagt der Nhaas anders Aartwolven genaamt, een dier van groote als de jakhals, 't geen zig alleen met mieren voed, en tot eene smakelyke spyse verstrekt."

Nama word /aris, Afrikaans: opbly, English: to remain up."—To me it seems that N. $\neq are-b$, Stechgras (or the feminine form) would be more apposite.

(vii) p. 77: Koeno (=kuno), beads (made of glass). Wikar says that they come chiefly from the Zountama, a tribe said to be living near the coast on the far side of the Zambdama. The former get them in exchange for cattle from the Kawep (i.e. the Ovambo). Vedder (u.s., p. 27) has something interesting to say about these beads: "Auch was Wikar von den Perlen, die die Stelle des Geldes vertreten, erzählt, entspricht durchaus späteren Erfahrungen im Ambolande. Noch vor 30 Jahren bildeten unansehnliche Glasperlen das einzige Geld der dortigen Stämme. Man erhielt es durch Vermittelung der Portugiesen aus Angola... Die unansehnlichen Perlen der Ambo wusste man nirgendwo aufzutreiben, bis man herausfand, dass eine Glasfabriek in Italien sie seit alten Zeiten herstellte."

This is most remarkable. Kuno, I surmise, may be a loan word. Cf. Portuguese cunho, coin; Italian conio, a stamp to coin money with, money; and English coin (from French).

(ix) p. 77: Zountama is in the v.R.S. publication equated with χ au-dama or \neq ou-dama; and Zamdama with //gami, water, in this case signifying ocean. Dr. Vedder (u.s., 27) had expressed this opinion. "Die Zountama aber sind die Choudama, d.h. die Schmutzdama oder jetzt Bergdama genannt... Wikar bemüht sich den tief aus der Namakehle kommenden Anlaut Ch (= χ) durch ein Schriftzeichen wiederzugeben und wählt dazu ein Z." If that is so, one wonders why Wikar did not choose the g rather than z. In writing Kalagas, e.g., he certainly does employ g to denote the guttural sound; so also in Kougaas. And as for Zamdama, why should zam be //gami, when //gama is regularly represented either as kamma or gama (e.g. Toelykamma, Koungama, Amkams, Kamas). Except for Zabiesis (where z stands for ts) the z in the Journal is simply z or s and nothing else.

Is it not possible to think that Sam-dama stands for San-dama? Vedder himself, our best informant, tells us that the Damas had very close connections with the San who spoke a kind of Nama: Im nördlichen Teil von Südwest sprechen sie (die Bergdama), wo sie noch unberührt nach alter Weise leben können, den Dialekt der hottentottischen Saan, und im Süden reden sie ein reines Nama. (Vedder, u.s., 107). Also, to quote from Vedder's book on the Bergdama (1928): "Die Buschmänner von Hei/lomn, die auch Nama sprechen und unter deren Einfluss die nördlicher wohnenden Bergdama lange gestanden haben," etc. It

appears to me, therefore, that Zamdama, also written Sambdama in the Archives copy,—which, by the way, also has Soentama (at least once) for Zountama,—stands for San-Dama. Just as the Samgomomkwa (above iii) were found to be "Bushman Hottentot" San people, so the Samdama may be Bushman Hottentot San-Blacks. And what of the Soentama? Do they not belong to the same type of people? We shall, I think, hardly evade the inference that Soen or Zoun is a mere phonetic variant of San. Changes of an to un, I may add, are not unknown in Nama. Compare the variants Namakwa, Nomakwa, Numakwa (in v.R.S. XV); N. /hanos, Nachteule (Olpp) and /hunos, die Eule. N. !gãb, and Bergd. !gũib, brother. Cf., too, N. gama-b or gomab, or gumab (Tindall), ox, which appears as gume or gumi in most Bushman dialects.

- (x) p. 80: De Schulpe of kouers. The latter word remains untranslated. Surely kouers is cowries in English, from Hindustani kauri. This is borne out by the more correct spelling in the Cape Archives copy: cauris and chaurias.
- (xi) pp. 94, 236: ikode solep, verwensch de zon. Dr. Vedder (d. alte S.W.A.) equates ikode soreb!=i go $\mathfrak{F}e$ soreb, die Sonne ist untergegangen. This explanation is repeated in v.R.S., vol. XV, 94, while on p. 236 Dr. Engelbrecht equates the de solep= $|/^2o|$ re soreb, "die, then, sun; vrek tog son!" Professor Maingard (Ba. St., X, 35), too, opines that the phrase is a faulty transcription and substitutes $|a|\chi$ are solep, damn the sun. To me it seems that a word has been overlooked that would fit perfectly without necessitating any drastic change: N./goë, fluchen, schändlich schimpfen. As the meaning is no doubt meant to be passive (verwenscht zon, verwenschde zon), thode solep=|goehe soreb. The reason why the sun is violently cursed is clearly given in the Archives Text: because of its excessive heat; while the gentle moon is welcomed with joy and dancing.
- (xii) p. 96: "Toelykamma or Scarwater." Annotators have racked their brains in trying to find the original of toely-. According to Moritz³ Toelykamma=Gliedwasser (cf. Nama dū-s Gelenkwasser Gliedwasser, eine Krankheit). To the annotators of the v.R.S: publication XV, toely is either |uri, dirty or !kuri, white (p. 96); while Maingard connects it with N. |gore-b, an incision, with the scar resulting from it. (Cf. Kroenlein |goreb, eine Art Schröpfung, scarification). But is there no Nama word for scar? Even the Bushmen have a word twī, scar (recorded by Dr. Bleek, Bushman Folklore, pp. 135, 129), which I

Mitteilungen aus den deutschen Schutzgebieten, Bd. 31.

mention, as I suspect there may after all be a Nama word that has not yet been recorded.4

- (xiii) p. 129: "Kamkao or the Hartebeest River," connected by an annotator with Nama //kamab; and reference is made to Kakamas. To complete the identification it may be noted that Kakamas is referred to by one of Miss Bleek's informants (Ba. St., X, p. 202) as //ka//kammi,—//kammi evidently standing for //gam-m-i, water, while //ka stands for //kama-b, the hartebeest. Kakamas therefore abbreviates the first part of the compound word //kama-//gami, which is evidently Wikar's much curtailed Kamkao (loco Kamkami?).
- (xiv) p. 130: Koeninganib (H) or Koeningamb (A) or Olivenhoek=Koninganes (sic) in Wikar's map, which is explained (p. 131) as being equivalent to N. !gomi, wild olive tree, and \(\neq gabis\), nook; while on p. 19 Koeningamb is associated with !gomi and water (//gami). Thus two different explanations are offered for the latter portion of the word. \(\neq gabis\) (for nook) is not known to me. In any case, the Nama word //hõas, corner, would seem more appropriate and fits tolerably well.
- (xv) p. 130: "Hosabes or Foundling," is correctly associated with N.hō, to find, get, bear; but be can hardly be described as a "locative." To complete the explanation, it should be noted that hosabe is used passively. Compare Kroenlein, 293 "-sa wird auch gebraucht zur Bildung passivisch gedachter Substantiva, e.g. ore-sa-be-b, der Erlöste (< ore), !khō-sa-b, der Gefangene." -s is, of course, the nominal suffix of the new word formation Hosabes, which may be rendered: goedgevonden. Another Hosabes is referred to by van Reenen as "Onsabees" (cf. v.R.S XV, 300).
- (xvi) p. 167: Soenop, the chief of the Kouringais (the High Kraal Koras). The word is, I think, plainly connected with N. sunu, fechten; sunub, der Streit (Kroenl.).

The Rev. F. Pönnighaus of Okahandja has in the meantime informed me that there is no general term in Nama for scar. The most commonly used word is |hawi-ams (wound-mouth) applied to a scar resulting from a bruise, or an unintended cut or gash, or a boil; while |goreb refers to a scar due to an incision or scarification, as a remedy for headaches, etc. The mark branded on cattle is daus. The scar or pit due to venereal disease is ||nami; while the mark of a stiched wound is \(\psi om-daob\). This very complete note thus substantiates Maingard's explanation. We may therefore rest satisfied that Toelykamma is |gore||gamma, probably so called on account of the scarred appearance of the ground near the water-hole (cf. v. R. S., xv, p. 97 n).

I read -ganes, on the original map in the Archives copy.

BOOK REVIEWS

Um Yezo by J. J. R. Joloße. (University of the Witwatersrand Press, Bantu Treasury Series, No. 2. pp. 94, 1936, 2/6 net).

The author of this book has written and published quite a number of poems on subjects that specially appeal to tender feelings and those that refer to natural phenomena. The selection made in *UmYezo* is typical. Here too we notice that he specialises in topics rarely utilised by African poets, such as The Shepherd, The Death of an Infant, The Lament of the Ass, Admiration of the Butterfly, The River, Our Dog, Far Hills, Grandmother, The Spring, Our Cat, and so on.

His elegant touch invariably befits the subject, making the book as a whole leave on one a general impression of a delicately cultured mind with true poetic poise. He happily steers clear of the pitfall of attempting to imitate European rhymes, which often betrays forced effects in the case of many who indulge therein.

This book marks a forward step in the development of gentle compositions in African tongues, and will help to give Xhosa readers a variety in the growing number of publications in the new orthography. Its hundred pages are neatly set off and bound by the Lovedale press, and make one grateful to the Witwatersrand University for producing this "Treasury Series" to elevate Bantu belles lettres.

D.D.T.J.

- Paul Schebesta. Der Urwald ruft wieder: meine zweite Forschungsreise zu den Ituri-Zwergen. pp. 208, maps, illus. (Verlag Anton Pustet, Pustet, Salzburg-Leipzig. 1936).
- Edmond Verhulpen. Baluba et Balubaisés du Katanga. pp. 534, maps, illus. (Anvers: Avenir Belge; Paris: Librairie Larose. 1936. 175 frs belges.)
- Monica Hunter. Reaction to Conquest: Effects of Contact with Europeans on the Pondo of South Africa. pp. xx, 582; illus. (Oxford University Press, for the International Institute of African Languages and Cultures. 1936. 30s.)

Africa has come of late to be as happy a hunting ground for anthropologists as Oceania and America. The International Institute of African Languages and Cultures, the Rockefeller Foundation, and similar bodies have sent professional fieldworkers to most parts of the continent;

while almost everywhere missionaries, government officials, and other local residents have been stimulated to devote themselves to ethnographical research more extensively than did their predecessors. Our information regarding African cultures is being so rapidly increased that very few, if any, tribes remain of which we know little more than their name.

The three books listed above are all noteworthy contributions to African ethnography, in so far as each contains a large amount of new information about the peoples with whom they respectively deal. Yet among themselves they differ so much in content and arrangement that it seems worth while pausing to ask, just what is the ethnographer's task? What is the aim of all the fieldwork that is being carried on so extensively and enthusiastically? What is it we are trying to discover about the African Native, and why? And how must the fieldworker present his material so as to achieve most satisfactorily the object he has in mind when he sits down to write his report?

We shall assume, to start with, that the trained fieldworker of modernatimes is not merely a recorder of customs and beliefs which, because of their remoteness from our own, can be written up for the entertainment of the general reader. There is ample scope for books of this kind. But they can as a rule be written more competently by journalists and professional travellers than by the average anthropologist, whose works in fact are too often redeemed from dullness only by the exotic nature of what they are describing. In any case, it is not merely for this purpose that the fieldworker is subsidised. His investigations are intended to serve the interests either of the "practical man" who has to deal in one capacity or another with Native peoples, or of science in general and of theoretical anthropology in particular.

It is only within recent times that the "practical man" has come to appreciate the assistance a knowledge of Native life can be to him in his work. By no means all of them are yet convinced; and it is true also that anthropologists have often tended to exaggerate the importance in this respect of their subject. But there does appear to be an increasing tendency to regard ethnographical investigation as an essential aid to modern Native administration, evangelisation, education or economic exploitation. Not only are government officials, missionaries and others who must live and work among the Natives being encouraged by their superiors to take courses in anthropology. Many Administrations also employ full-time or part-time anthropologists to inquire into such matters as the political and legal systems of the Native peoples under their jurisdiction; large commercial enterprises have sometimes found the anthro-

pologist a useful source of information on special problems of Native labour or marketing; while the International Institute of African Language and Cultures deliberately encourages its Fellows to study such aspects of Native life as are of immediate importance to the "practical man."

The fieldworker in all these instances has then as his primary aim the collecting of information to be used in the formulation or further development of policy. His report should therefore be straightforward, lucid, and to the point, dealing with essentials rather than incidentals, and as free as possible from those personal embellishments lending interest to a traveller's tale but seldom relevant in other contexts. How far he should also advocate policy will of course depend upon the type of investigation he has been asked to make. Here it need only be said that many anthropologists fail to realise that what may be desirable from their point of view, as interpreters of and sympathisers with the Native culture, may often be impracticable or irreconcilable with the broader aspects of administrative or mission policy. They may, if so inclined, attack or suggest modifications of current policy; but they must not assume, as they sometimes tend to do, that they alone are entitled to decide what should be done to or for the Native.

Somewhat similar in range to the specialised investigations of the "practical" anthropologist are the investigations, undertaken for general scientific purposes, into particular aspects of Native life. We have here, to start with, such work as has been or is being done in this country by Kirby on Native music, by Watt and Breyer-Brandwijk on Native medicines, by Phillips on the ethnobotany of Basutoland, and by Fox on Native diets. The only possible claim this work has to being termed "anthropology" is that it deals with primitive peoples. But I do not suppose that the scientists referred to feel that they are in any way wandering beyond the legitimate scope of their respective fields of music, pharmacology, botany and biochemistry; and I agree with them. There is, in fact, not the slightest justification for regarding every study of primitive peoples, no matter with what aspect of culture it is concerned, as anthropology. And there is no reason why in time to come economic historians, jurists, political scientists, educationalists and other "social scientists" should not also go out into the field themselves, just as psychologists like Porteus and Roheim have done, in order to obtain first-hand material for their special branches of study; or why the " anthropological " fieldworker himself should not concentrate upon one or more selected aspects of culture. The fieldworker specialising in this way- and already most of us are beginning to specialise to some extent, if only by excluding from the range of our investigations physical measurements, "material culture" (technology), or some similar topic with which fieldworkers of past generations invariably dealt—must then ask himself what particular branch or branches of science his work is suppose to illuminate; and the manner in which he writes up his material must be determined accordingly. Margaret Mead is one of the few modern fieldworkers who seems to have realised fully the possibilities of such specialisation.

What we have just said refers to studies of particular aspects of culture, not to general monographs of the type most fieldworkers still attempt to produce. The former I would not myself regard as specifically "anthropological" studies, unless we are sufficiently consistent to regard all branches of social science, whether dealing with primitive or with modern peoples, as branches of anthropology. But the general monographs can certainly not be regarded as studies in either religion or jurisprudence, ethics or descriptive economics, aesthetics or education; and must therefore be treated as a separate category. Now such general monographs, if not written primarily for the "practical man," may be contributions simply of fact, or of theory as well as fact. Work of the former kind may be regarded as akin to the descriptions given by botanists and zoologists of new forms of plant or animal life. The fieldworker describes a hitherto unknown tribe, or describes more fully one about which something was already known. He thereby provides the comparative anthropologist with more data upon which to work: but he does not himself contribute anything further to the advancement of anthropological learning. The great majority even of modern fieldwork monographs are essentially of this type. But the fieldworker, if a professional anthropologist, sometimes attempts in writing up his material to contribute also to anthropological theory; and is therefore confronted with problems of exposition which do not concern the mere collector and recorder of fact.

"Theoretical anthropology" is at the present time represented by two main schools of thought. The "historical" or "diffusionist" school aims primarily at reconstructing the history of primitive culture, and particularly of cultural migrations and interminglings. It is, in fact, although this is seldom clearly realised, merely that branch of history which happens to deal with primitive cultures. The "functional" school aims at understanding the nature and workings of culture; and is perhaps more closely allied to sociology than to any other discipline. The fieldworker, if interested in the historical approach, should then deal mainly with those aspects of culture which will enable him to determine the history and affinities of the tribe or tribes he is studying. The modern fieldworker in Africa will study the history of his tribe not only

in relation to its African neighbours, but also in relation to the now omnipresent Western civilization. Studies of "culture contact" between Black and White are in fact very fashionable at the moment; and the fieldworker engaging in them is contributing information of value not only to the practical problems of race relations, but also to the theoretical problems of the mechanism and effects of diffusion. His monograph then will embody an account of the present-day tribal culture, an analysis of the various historical factors which have made it what it is, and an interpretation of culture contact in the light of his material. The work of the Keesings in Samoa and the Phillippines, of Redfield in Mexico, and of Herskovits on the American Negro, provides illustrations of this method of investigation.

The "functional anthropologist," on the other hand, will attempt to show how the culture of the people he is studying enables them to carry on life as members of an organised society. Mere description of cultural institutions is not enough: he must also explain the part played by each institution, custom and belief in the culture as a whole, what its special "function" is, and how they are all integrated together to form a coherent working entity. The accusation has often been made against self-styled functionalists that they have not yet given us a single complete analysis of a culture along the lines they advocate, not a single study in which the inter-relationship of all the different aspects of a culture has been clearly brought out. This is substantially true of Malinowski and some of his disciples. Malinowski's article on "Culture" in the Encyclopaedia of the Social Sciences shows how valuable an instrument of analysis and description his method can be; but his own fieldwork accounts have so far all been studies of single aspects of Trobriand culture-of descriptive economics, jurisprudence, psychology and "sexology"—and not of the culture as a whole. Radcliffe-Brown's Andaman Islanders, on the other hand, is an excellent illustration of the functional monograph in practice.

It must be added that it is possible to combine in a single study both the historical and the functional approaches; and indeed most of the "functionalists" now working in Africa have found themselves forced to draw more and more upon historical matter in their attempts to understand and interpret the modern cultures they are investigating.

In the light of these observations, we may now attempt to estimate the significance of the three books under review. Pater Schebesta's second account of the Ituri Pygmies contains a very detailed description of their domestic, social and ritual life, and of their relations with their Negro overlords. It is, however, more essentially a personal record, an

account of Pater Schebesta's experiences among the Pygmies, than a carefully-planned, systematically-arranged scientific study. It adds considerably to our knowledge of the little people; it is written in a lively and entertaining manner, and contains some very good illustrations. But it is really little more than a glorified travel book, and as such makes no important contribution to either administrative policy or anthropological theory, although workers in both fields will welcome it for the information it contains.

M. Verhulpen's monograph on the Luba is an excellent example of the sort of book that will be of great value to government officials and other "practical men." A lengthy and admirable account of Luba history is followed by a series of chapters in which the tribal composition, social and political organisation, legal system, economic life, and ritual beliefs and practices of the different branches of the Luba are clearly and concisely described. Special mention must also be made of the full lists of Luba chiefdoms and royal genealogies, of the brief but enlightened suggestions on future administrative policy, of the outline of Luba grammar, of the long bibliography, and of the few but extremely useful maps and diagrams. Anybody whose work brings him into close contact with the Luba will find in this book all the essential information he needs, systematically arranged and lucidly set forth. It succeeds admirably in fulfilling the special purpose for which it was written.

Miss Hunter's book on the Mpondo is the most important contribution to South African ethnography since Junod's great classic. It contains, to start with, the first complete account yet published of any South Nguni tribe, and so fills a very conspicuous gap in our knowledge of the Native peoples of this country. Miss Hunter describes in meticulous detail every aspect of Mpondo tribal life, supplementing the statements of Native informants with a wealth of personal observations and a large number of case-histories which between them illuminate magnificently every custom and belief she describes. Special reference may be made in this context to the chapters on "witchcraft and magic" and "doctors," where the records of actual instances coming to her notice and of ceremonies and seances she attended bring out very clearly her patience and skill as an observer, the high degree of confidence she was able to inspire in the people, and her talent for vivid description; while the discussions of the social aspects of magic and witchcraft, and of the place of "doctors" in the community, are good illustrations of the lines along which a functional analysis should be carried out.

The outstanding merit of the book, however, lies in the fact that it is the first serious attempt to give due weight to the effects of European contacts on a Southern Bantu culture. The book falls into three parts. The first and longest deals with Native life in Pondoland. Here the traditional culture of the people still persists very strongly, but Western civilization has penetrated sufficiently to enable Miss Hunter to write a special chapter on Christianity, and to include in most of her other chapters, e.g. those on economic organisation and political organisation, sections on such new elements as "working for Europeans" and "the existing system of administration." The result is that we are given a faithful account of Mpondo culture as it actually exists to-day, a picture in which the respective roles of traditional and borrowed elements are justly appreciated and discussed. This part of the book alone would therefore rank as a distinctive contribution to modern ethnographical method, although it is of course by no means the only study of its kind.

But Miss Hunter has done more than this. The primary aim of her investigation was to study "the effect of contact with Europeans upon a Bantu community." Realizing that the nature and degree of European influence vary in different areas, she did not confine herself to Pondoland but went on to study Bantu life first in two urban areas (East London and Grahamstown) and then on European-owned farms in the Eastern Province. The second and third parts of the book deal with these two communities respectively. They are not nearly so detailed, but none of the essential information is lacking: there is in each case a description of contemporary economic life, social organisation, and religious and magic beliefs. No work of this kind had previously been done as far as the farm Natives are concerned, so here Miss Hunter has set the lead in a new type of ethnographical research for which South Africa offers some good opportunities. Her work on the urban Natives is similar to that done by Mrs. Hellmann in Johannesburg, and by Mrs. Krige in Pretoria. Between them these three young anthropologists have here struck out on a line of research which perhaps more than any other will help to emphasis the services scientific fieldwork can render to all concerned with problems of race relations.

In a final chapter on "Tendencies," Miss Hunter contrasts the types of cultural change in each of her three areas, discusses which are the products of local conditions, and which are the more general tendencies; and concludes with an important analysis of Bantu opinion about the forces of Western civilization. No one interested in the present situation and future development of race relations in South Africa—and that surely includes every thinking person in this country—can afford to ignore the material so forcibly presented in these pages. But since we are here concerned with the scientific aspects of her work rather than with

its practical implications, we need only remark that this chapter, drawing together the main threads of the observations scattered throughout the rest of the book, forms a fitting conclusion to a well-executed scheme of research.

The book at times nevertheless arouses uneasy speculations about the trend of modern ethnographical description. It is a lengthy piece of work, containing, especially in the part on tribal life in Pondoland, some very detailed accounts of such ceremonies as birth, initiation, marriage and ritual killings. Miss Hunter has carefully avoided the sort of mistake frequently made by earlier ethnographers, who devoted almost all their space to these more picturesque elements of Native life and ignored the more prosaic elements actually making up the greater part of primitive man's daily behaviour. One wonders, however, whether it is worth while in a book of this sort to record every custom and belief as fully as she has done. Had Miss Hunter been writing the same book about the people of modern England, I doubt very much if she would have dealt in such great detail with birth, christening, confirmation and marriage ceremonies and taboos, the training and practices of physicians, veterinary surgeons or agricultural experts, the coronation ceremonies of the king, the festivals of the church calendar or the elaborate rituals of the Roman Catholics. No doubt it is useful to have the details of all such ceremonies and events on record; but whether what purports to be a general description of the people is the right place for them is debatable. Personally I would have preferred a more concise account, in which the essential features only, and not every incidental detail as well, are recorded. The vast mass of detail which every fieldworker accumulates, about certain topics at least, could equally well have been published in article form in the appropriate journals, where those to whom they are of any interest will be able to find them. This would have reduced the book to more manageable proportions, and so brought it more readily within the range of appreciation of the average student and interested layman. As it is, the old complaint that one cannot see the wood for the trees does appear to apply to at least some parts of the book. These remarks on descriptive technique, however, must not be taken as adverse criticism of what is, despite its occasional lack of balance, the best fieldwork monograph yet published on a South African tribe, not excluding even Junod's famous work.

I. SCHAPERA.

Makinta Tales, by G. H. Franz, illus. by B. K. Franz (Shuter & Shooter, Petermaritzburg, 148 pp. 1936, price 4/6).

A book of sketches of Native life and thought, most of which originally appeared in the South African Nation, with an appreciative foreword by D. McK. Malcolm, Chief Inspector of Native Education, Natal. On reading this wonderfully written little book I feel that the foreword is fully justified and that Mr. Franz has made "a real contribution to literature and ethnology." Makinta, the old Mosotho, represents the "older school," the polished Native observing the etiquette of the tribe. paying respect to the moruti who knows how to pay respect to the Native elder. Though the stories in this book may contain additions from the imagination, they ring true; and a great deal of good will be done by the book if the younger generation of Basotho catch from it something of the spirit of their elders, and if the present generation of Europeans learn from it something of the latent dignity and respect for law that is in the Bantu people of South Africa. Mr. Franz, who grew up amongst Natives and spoke their tongue before he spoke any other, as he tells us in his Preface, has depicted Native thought and argument very vividly; his writing teems with Sotho idiom and proverb, and his characters live before the reader. For a while old Makinta seems rather idealistic, but by the time he takes "his ninth" he comes down from his somewhat lofty pedestal and reveals the bargaining wife-seeker, well justifying the moruti's joking remark, "Makinta, you are an old humbug!" Among the most valuable sections of this little book are the description of the law indaba in "They Fought," and the marriage negotiations in "His Ninth." I think a better tittle for this collection of sketches would have been Makinta Talks. The value of the book in enhanced by the attractive illustrations by Mrs. Franz. C.M.D.

Jabo Proverbs from Liberia, Maxims in the Life of a Native Tribe, by George Herzog, assisted by C. G. Blooah (Oxford University Press for the International Institute of African Languages and Cultures, pp. 272, 1936, 10/6 net).

This book consists of 416 proverbs and 74 "Sayings" in the Jabo language of Eastern Liberia. As the author states in his preface and as the book shows throughout, a great part of the information it contains is due to the contribution of Mr. C. G. Blooah, a Native of Nimiah, who had received most of his education in the United States. The collection is divided into three main heading: Nature, Culture and People, with addition of the Sayings idiomatic, definitive and descriptive. Each proverb is put down with a word for word translation beneath, then an idiomatic English translation followed by a discussion upon the significance, occurrence when heard and general application. This method

gives material for the student of the language as well as much ethnographical and historic material of great value. Large sections of these comments have been supplied by Mr. Blooah. In some instances we feel that the comments could have been more concise and a good deal of repetition of the same type of application avoided; some of them are a little wearying in the reading.

The proverbs, like all African Native proverbs shew a remarkable Native insight into Nature, the habits of animals, and the wonderful alertness of the Native mind in drawing parallels.

A very valuable section of the book is the author's introduction in which he discusses the function and forms of the proverbs, their patterns and uses. With treatment of this kind proverb lore tends to become a science. One quotation from this introduction I make here: "Proverbs and related forms function very powerfully in Africa in describing, characterising, evaluating persons, events, phenomena, situations. The proverbs more than any of the other categories of formalized expression serve to transform particular experience into terms of previous, controlled experience, or, in law and ethics, of traditional observance. They are almost the exclusive, certainly the most important, verbal instrument for minimizing friction and effecting adjustment, legal, social or intellectual."

The Oxford Press has presented this valuable collection and commentary in a most pleasing way.

C.M.D.

An Introduction to the Ibo Language, by Ida C. Ward, D.Lit. (W. Heffer & Sons, Ltd., Cambridge; pp. 215, 1936, 6/-).

Miss Ward, in this publication, puts African languages further in her debt. She is already the co-author with Dr. D. Westermann of Practical Phonetics for Students of African Languages, and the author of The Phonetic and Tonal Analysis of Efik, besides being well-known in England for her standard work on English Intonation, Speech Defects and English Phonetics. Her bias has been of late years towards intensive work on the subject of intonation, which until recently had received such scant attention. It is only to be expected therefore that on her entering the field of West African languages, intonation should be her first important study.

In the book before us Miss Ward has tacked the tones of Ibo in such a way as to help the learner of the language into a method of detecting, classifying and remembering the words with their tones and tone changes. Some people try to learn the vocabulary of a tone language and then

learn the tones afterwards. That method is fatal: the tones and their inflexions are part and parcel of the word and the only way is to learn the word correctly with its accompanying tones. The difficulty of this is apparent when, with nouns as an instance, words have first, second and sometimes third tone changes. Miss Ward has classified and explained these and by her numerous examples and profuse exercises attempts to develop in the learner a definite tone memory. She has amply demonstrated that a tone language must be learnt tonally—that is what this book does. It is entitled an Introduction and does not, therefore, deal with the intricacies of grammar. A student using this book must also have Spencer's or Adams' grammars to supplement his studies. No attempt is made to be grammatically critical, and the standard classification and treatment are followed. In addition to the numerous examples and exercises given, a number of continuous texts with tones marked and careful grammatical analysis, is supplied, as well as numerous proverbs and common expressions.

The tones are indicated on a five-height principle after the short examples and above the continuous texts, and the student is early drilled into working with words without tone indication as exemplification of rules expounded. Miss Ward has developed a technique for the learning of a tone language which is likely to be applied in other West African languages. This book is certainly a model of careful painstaking work and is a great credit to the author.

C.M.D.

The Girl who Killed to Save, by H. I. E. Dhlomo (Lovedale Press, 1936, 1/6).

This is a five-act play based on the dramatic incident in Xhosa history when, influenced by the "prophet" uMhlakaza and his prophesying daughter uNongqause, the people killed their cattle and destroyed their grain, believing that thus they would drive out the White man and receive an abundance of cattle and food. Mr. Frank Brownlee has written a short foreword. Dhlomo has chosen English as his medium of expression, as he is convinced that in this way his writings will reach a wider reading public—it certainly makes such a work as this applicable to a more varied public than if he had written in Zulu, his mother tongue, and there is to-day an ever-growing urban Native population to whom such a play as this should be welcome.

It is to be hoped that this play will achieve the success it deserves, and will be followed by others from the same pen. There are other great incidents in Bantu life and history which should lend themselves to dramatisation. As a piece of English literature, I feel that this work could be improved. The expressions used, for instance, by Mrs. Brownlee the Commissioner's wife, do not seem natural enough in the circumstances and the soliloquising of Hugh and the Missionary a little too unreal. It is in the depiction of the Natives themselves that Dhlomo excels, and he should bear this in mind in future work. He will probably do much better in scenes, where European characters do not come in. I cannot think, for instance, that his picture of the missionary with the victims, as described on page 30, rings very true; or that the statement of the missionary "God is in the very sins we commit, ready to change evil into good," will be accepted as orthodox theology! One thing I might point out for correction. On pages 23 and 24, Hugh speaks of "the doctrine of the survival of the fittest," and the "liberating process of evolution." Hugh was speaking in 1857; Darwin's Origin of Species was first published on November 24th, 1859!

I consider the first scene of this play the best; it shews that the author has real dramatic ability and poetic instinct. Appended to the play are the songs set to tonic-solfa written and prepared by Dhlomo. Their use in representation should greatly enhance the general effect.

C.M.D.

Ukuthuthuka kwesizwe esinsundu, by A. Z. Zungu (Shuter & Shooter, Maritzburg: 79 pp. 1936, 2/6).

A little book by the author of uSukabckhuluma, tracing the development of the Bantu people, particularly giving the early history of the Norwegian Mission with interesting references to Bishop Schreuder, and tracing missionary and government aids in developing the Zulus, by education, hospitals and other amenities. The Zulu used is good, and the book should be useful as a reader.

C.M.D.

UShaka. by R. R. R. Dhlomo (Shuter & Shcoter, 1936, 2/6).

In reviewing a Zulu book I feel I cannot do justice both to the book reviewed and to the history of Zulu literature if I pass by without commenting on certain points. Roughly speaking in the Nguni cluster of languages we have Xhosa and Zulu standing prominent. The history of Xhosa literature dates from 1867 when Soga translated *Pilgrim's Progress*, followed by Gqoka's *Mfecane* 1897, then Bud Mbelle's *Kafir Sholar's Companion* of Xhosa proverbs in 1903. If we look into Zulu literature we discover that two publications by Bantu authors appeared only in

1922, i.e. Fuze's Abantu abamnyama and Dube's Isitha somuntu. Zulu literature is very young. This does not mean to say that Zulu writers did not exist. Like the rest of the Bantu authors they have always suffered from the Bantu author's fallacy: Prove your education by writing in a foreign language. From 1930 there has been a great awakening and over five authors have sprung to give us something in Zulu.

Before me I have the book *UShaka* written by Mr. R. R. R. Dhlomo. Before you read the book you have already a setting, some objectives about Shaka. You expect an atmosphere too highly charged with murder, war cries and description of gruesome shambles.

Dhlomo's pen seems to be uncertain and wavers at the opening chapter when he deals with rather a far-fetched description of the Zulu deity and leaves off suddenly at the meeting of Senzangakona (Shaka's father) and Nandi (Shaka's mother). The part played by Mbengi is not well portrayed. Those who are already familiar with Shaka's story will remember that there is a cloud round the marriage of Senzangakhona and Nandi, and writers have not been reconciled in this. Dhlomo adopts the view of the illegitimacy of Shaka, the view found in Stuart's books. Now there remains another point in which there are many views. The origin of the name "Shaka." This is clearly treated in the book, in that ishaka is explained as "blood poison." On conceiving Shaka, Nandi was reported to her parents as suffering from blood-poison (ishaka) because Nandi had not been lobola'd and for her to conceive would mean a disgrace to all the maidens of her age-grade (ibutho) and would also bring shame on her father, the chief of the Langeni tribe. Perhaps Dhlomo could have expanded on this point.

The wholesale massacre of insubordinate tribes and those against whom Shaka was angered is very well depicted in the slaughter of the Langeni people—Shaka's mother's tribesmen who had refused him shelter during his wanderings, when Senzangakhona wanted to kill him. Having wiped out the tribe he built on their bones and the ashes of the kraal a new kraal called *Dlamathe* (Eat your own spittle). According to custom, this was done to incorporate the spirits of the dead and rival people into the realm of the living and victorious.

Shaka appears in many forms under Dhlomo's pen. He is a tyrant and a merciless despot; a humorous, respected and loving king; a warrior, a founder of an aristocratic nation, and a prophet; a man who always wanted to solve some difficulties. Being a primitive king in a primitive society a difficulty was solved only when the subject of the difficulty had been wiped out altogether. Does this explain Shaka's cruelty?

There was a time when witch-doctors were a thorn in the happy progress of the Zulu nation, when married women practised charming and kept secret goblins (*izimpaka*) for murdering their rivals in marriage. When the old unlearned people describe the day when Shaka cleaned Zululand of these people one cannot help but marvel at the aptitude of the Zulu words in their concise picturesqueness. Dhlomo's language in describing such scenes is mild in exoteric eloquence and a wild array of burning words that are capable of portraying innumerable scenes of beauty and tragedy so that the reader is gripped in the iron vice of the language. Perhaps we young writers still fail in reducing spoken eloquence to letters. But this is possible when one reads a book like Dube's-Intsila kaShaka.

I agree with Dhlomo's version of the death of Nandi. Some writers like H. Rider Haggard have spread a version that Shaka killed his mother for divulging some secrets. But to a man who is familiar with Shaka's devotedness to his mother and his behaviour after her death Dhlomo's version which is shared by many authoritative writers, holds water. Nandi died a natural death.

In this book we find Dhlomo growing to maturity in his knowledge of his subject. I admire him the more in that within a period of two years (1935-36) he has been able to write four Zulu books. There is only one thing which worries me as a reviewer of this book. I wish Dhlomo could not have been working in water-tight compartments in adapting the book and style of his language to the class-room. With the advent of the Bantu Authors' Conference of 1936 let us hope that Bantu authors will be allowed a free play to the treatment of their subjects and a better exposition of facts, so much needed by the man of the world.

Finally I recommend the book to the readers of *Bantu Studies*. It is the best book on *Shaka* for it contains facts and very little of fictitious tales that have shrouded Shaka's history.

B. W. VILAKAZI.

NOTES ON THE POLITICAL AND JUDICIAL ORGANISATION OF THE TAWANA¹

By E. H. ASHTON

HISTORY

The Tawana Reserve in the north-west of Bechuanaland Protectorate is inhabited by a number of different tribes under the hegemony of the one tribe from whom the Reserve takes its name. In this Reserve there are, according to the 1936 census, 7,072 Tawana, 16,495 Kuba, 2,933 Herero (locally termed "Damara,") 5,919 Mpukushu, 2,270 Kgalagadi, and many different groups of Bushmen, including some 3,000 MaSarwa. Of these many tribes the Tawana and the Herero are the only ones who have, or have had in recent times, a defined and strongly-organised political organisation. The present organisation of the country is therefore fairly simple, and Tawana rule, though weak and diffused, remains undisputed.

The people are widely scattered in small village and cattlepost settlements, and there are no large concentrations of population. This position, unique in the Protectorate, has produced problems of organisation unknown elsewhere.

Ngamiland was originally inhabited by Kuba (who came in from the north-east), MaSarwa and other Bushmen; and there they were joined by Mpukushu and Maxereku filtering down from the north. They lived in small settlements each under its own head, who regarded himself as his own master. Some of these headmen were recognised as being senior in rank and status, but they were not accorded any political authority by the others. This type of organisation, which exists to this day, rendered them extremely vulnerable to attack by the tribally-organised people from the south. However, their unhealthy climate and the other preoccupations of the Southern tribes saved them, for generations, from invasion. But in about 1800 the Tawana broke into their country to disturb their peace and independence.

¹ This sketch was written at my request to provide some data for my forthcoming Handbook of Tswana Law and Custom. I feel it is sufficiently interesting and important in itself to merit separate publication. It is reproduced as I received it, apart from a few verbal alterations. Mr. Ashton is at the present moment Assistant District Commissioner of the Ngamiland District. In compiling these notes he was materially assisted by Mr. M. Mocuminyane, the official staff interpreter at Maun. —I. Schapera.

The Tawana are a junior branch of the Ngwato (BaGaMmaNgwato), from whom they broke away as a result of a dispute over the Chieftainship. Tawana, the founder of the present tribe, quarrelled with his brother Kgama, then ruling as Chief of the Ngwato¹. Finding himself in the wrong, and the weaker of the two, he followed the advice of his mother's people, the Kwena, and fled northwards to Lake Ngami with his followers. There, with the guidance of a Kwena regiment sent to help them, they quickly established themselves, and before long had become masters of the local MaSarwa and Kuba.

Tawana history has been fairly eventful and disturbed, although the country lies off the beaten track and tends to sink into the background of South African affairs. Ngamiland has been invaded by the Rotse more than once, and twice by the Ndebele; and the disturbances these invasions caused did not contribute to its orderly progress and development. The Tawana have also suffered from internal dissension, a failing to which they seem prone, and the tribe has been split at least three times. But there is no need to go into the details of their history,² although mention may be made of two points which bear on the present position. The first is the advent of the Europeans, which put an end to external disturbances. The second is the Sekgoma-Mathiba dispute, which was the last important internal dispute and from which the present phase of Tawana history can be said to start.

Fearing the encroachment of the Germans on the west, and the attacks of the Ndebele and later the possible encroachment of adventurous companies from the east, the Chiefs Moremi II and Sekgoma, through Chief Kgama of the Ngwato, asked for and were given the protection of the British Government. The boundaries of the Reserve were defined and limited by Proclamation, and land on the east acknowledged to be Crown Land. Land was also given on the west for the use of European farmers in what is now the Ghanzi District. The first regular administration of the country by the British authorities did not begin until about 1894.

The Sekgoma-Mathiba dispute occurred in 1905-6, though it took many years to work up and many more to die down. It concerned the succession to the Chieftainship. Its details are involved and obscure;

¹ This Kgama, the first of that name to rule over the Ngwato, must not be confused with his great-grandson Kgama III, the famous Christian Chief whose visit to England in 1895 was one of the most memorable occasions in the history of Bechuanaland. (I.S.)

² A detailed account, by Captain G. E. Nettelton, was published in *Bantu Studies* vol. viii (1934), no. 4, pp. 343-60. (I.S.)

its outcome was that Mathiba was adjudged by the then Resident Commissioner to be the rightful heir, and Sekgoma was banished. He was later allowed to settle at Kavimba, where many influential headmen came over to join him, leaving a rent and weakened tribe in Ngamiland. But when he died in 1913, followed a few years later by his son and sister—events which brought his line to an end—many of these people returned to Ngamiland, and were received back into the tribe, being reinstated to the positions they had previously held. This has gone some way towards mitigating the unfortunate effects of this tribal division, though it has not completely neutralised them.

One of the main reasons for the hostility shown to Sekgoma, who so far as can be gathered was the rightful Chief, was his strictness and firmness. Mathiba like his father was weak, and so drew to his support many of the leading headmen, who resented the tightening-up of the Chief's authority and were anxious to assert their own relative independence. Mathiba lived up to their expectations; and as time went on his weakness and incompetence were such that it became necessary for the Administration to cause a council of two to be formed to guide and control him.

Mathiba died in 1933; and as his son Moremi was still a lad at school, an Acting Chief was appointed by the tribe to take his place. He proved a disappointment, so, at the instigation of the Government, other people, though not fully entitled to act as such by Native law, were appointed regent in the hope that they would be less inefficient. Several were tried, but none proved very successful. Eventually, Gaetsalwe, a ngwana wa dikgomo of Moremi II, who had not hitherto been considered, was dragged from obscurity by the tribe, who insisted that he become the Acting Chief.¹ This request was granted, and Gaetsalwe carried on with moderate success for over a year, until he thankfully handed the Chieftainship over to his young nephew Moremi III on February 10th, 1937.

During these long years of inefficiency and misrule, practically all developmental work came to a standstill and tribal life generally sank to a low ebb. In the political sphere this was felt most in the gradual dispersion of the leading tribesmen and in the neglect of certain customs. Instead of being kept at the tribal capital, Maun, the people, in order to get away from tsetse-fly and to enjoy the freedom of their cattleposts,

² Ngwana wa dikgomo (lit., "child of cattle") is the Tswana term applied to a child begotten by some other man than the one on whose behalf bogadi cattle were paid for the child's mother. The woman's husband, by virtue of this payment, is legally regarded as the father of any children she may bear, no matter who their actual father may be. (I.S.)

gradually drifted out into the districts, where they began to lead a life of their own, indifferent to their tribal obligations. Mathiba at first tried to stop this by burning their cattlepost villages, but finding the Administration opposed to this devised no other means of checking them and left them to themselves. None of the Acting Chiefs made any attempt to improve matters.

Similarly, the political and judicial organisation was changed. In some ways it was simplified; but on the whole it only resulted in a weakening of central control and in administrative inefficiency. The young Chief, however, has already shown signs of his intention to improve and reorganise the present system.

DISTRICT ORGANISATION

In order to govern their country, the Tawana divided it into a number of districts. There were about ten of them, each under the control of a district-head, who was responsible to the Chief. The Chief was head of the whole country, but he too had a district under his immediate authority.

The district-heads were not of royal blood, but were eminent commoners known as batlhanka (lit., "servants") or basimane ba kgosi (lit., "the Chief's boys"), who for one reason or another had been given preferment and become the Chief's kgamêlô holders. The position once acquired became hereditary, although the Chief could create new batlhanka or degrade existing ones by giving or withdrawing his kgamêlô. Royal headmen were rarely given districts, no doubt because of the Chief's jealousy and lack of confidence in them.

The district-head's duties were fairly numerous. He was in the first place one of the Chief's counsellors, and as such had to live in the Chief's village and not in his own district. This handicapped his work to some extent, but he was expected nevertheless to visit his people from time to time and keep in touch with them and their affairs. He tried cases brought to him either at his own court in the Chief's village or when on patrol in the district; collected taxes and tribute for the Chief; in times of famine supplied his people with what grain and guns he could spare; and in times of war conscripted men as baggage carriers and porters for the Chief's army.

This system of administration had the advantage of providing the Chief with a cheap and safe means of governing the country and the large

¹ Kgamélô cattle are tribal cattle entrusted by the Chief to the care of selected commoners. A detailed description of this system, and of the conditions under which the cattle are held, is given below in Appendix II.

number of subordinate tribes. Its principal failing was that owing to the absenteeism of the district-heads their administration was not sufficiently close to be effective. A few tried to remedy this by appointing their own representatives to reside in their districts, but owing to the character of those appointed this did not prove successful. The position eventually became worse as a result of the confusion caused by Sekgoma's banishment; and although it improved slightly when the people returned from Kavimba, it never really recovered and had gradually to be altered.

The present position is simpler. The many outside districts have been re-arranged and amalgamated to form only four, and with one exception the old district-heads have been replaced by what are known as "Chief's Representatives." These four districts are Shorobe (the populated areas lying on either side of the Thamalakane, above the Matlapaneng bridge, and along the Mogohelo River right up to Mababe); Kabamokoni and Diei; Mohembo; and Tsau, which includes Nokanen, Gomare and part of the Swamps.

The position of district-head is no longer confined to the batlhanka; and of the four heads, one is a relative of the Chief. The appointment of Bokhutlo to Kabamokoni is also a slight exception to the old rule, for though he is a motlhanka (since his father was one of Sekgoma's batlhanka and kgamêlô holders) he is not a kgamêlô holder and is not of high status. For these reasons his position at Kabamokoni is somewhat difficult, and the people are inclined to treat him with less respect and obedience than they give to one of royal birth.

These "Representatives" now reside in their districts, and not in Maun as heretofore. Some of them do not patrol their districts as much as they might, but the mere fact of their presence nevertheless has some effect. Their duties are essentially the same as those of the old district-heads, though they have been modified slightly in certain details. They no longer collect tax or tribute, though they sometimes forward to the Chief sehuba (i.e. treasure trove such as elephants' tusks and a recognised part of other earnings) and other voluntary gifts. They are responsible for the general administration of their areas, hear complaints, try cases and carry out locally orders given by the Chief, or through the Chief by the Administration. Bokhutlo and Samuel (of Mohembo), whose districts are far from and out of touch with Maun, send in occasional reports.

The internal organisation and constitution of these districts is complicated; and as it varies slightly from district to district may perhaps be dealt with best by considering each district in turn.

(1) Shorobe (total population 3,188) is the simplest and the smallest. It used to be part of a larger district, controlled by the present incumbent's forbears, which was recently divided, part being absorbed by Kabamokoni and part by the Chief's district. The population consists mainly of Kuba, though there is a sprinkling of other tribes scattered about the country, with a small concentration of Tawana living in and near the Representative's village at Shorobe itself. The Kuba live in small independent villages, each containing from about ten to twenty families. Each of these villages, which are almost entirely kinship groups, has its own head, the "father" of the village, who hears disputes in which members of the village are involved, but over which he has little legal and compulsive authority. Cases which they do not settle are taken direct to the Representative's court.

It may here be noted that the Representative, Motsewakhumo, is also head of the Segongwane kgotla (or ward) at Maun. Consequently, the Shorobe district is sometimes said to be under the Segongwane kgotla and a part of it. This way of putting the position is not however clear or even accurate. All the statement means is that if Motsewakhumo lived in Maun, as he used to, cases from Shorobe would have to go to him there (i.e. to the Segongwane kgotla) before going on to the Chief, if appeal were taken.

(2) Kabamokoni (estimated total population 11,000) is the largest district, being an amalgamation of at least three of the old districts. It was created as recently as 1933 by Monnamaburu, who, acting for the old Chief Mathiba, then near his end, sent Bokhutlo as its newly appointed head. The latter was a young man of not very high standing, whose ability was his recommendation. To act as help and companion another Tawana was sent up with him.

The district is inhabited mainly by Kuba, Kgalagadi and Mpukushu. They live in small villages, though some are larger than those found at Shorobe; and all of them have their own courts and headmen with, however, stronger and more specific juridico-political authority than those at Shorobe. There are also a few more important headmen who are recognised as the heads or leaders of groups of villages, with authority over the headmen of these villages, and who try cases on appeal from their courts. The Chief of the Mpukushu lives in this district, but he is now no more than the social and religious head of his people, and politically ranks as an ordinary village headman.

(3) The Mohembo district (population 11,524) is very similar to the above. The only difference of any importance is that whereas Bokhutlo controls the whole of his district directly, Samuel, the Chief's Representative in Mohembo, controls part of his district indirectly through the heads of a fairly large group of Kgalagadi.

(Note. Since the above was written, Samuel has been removed for incompetence, and a local Tawana, Raditsabatho, temporarily appointed in his place. He is one of the dikgosana, "royal headmen," and for this reason his appointment has met with some criticism, mainly on the grounds that Representatives should be the "servants" of the Chief, and this the Chief's relatives can never be to the same extent. Moreover, the wealth that such a position usually brings should be held on behalf of the Chief as kgamêlô, and this a kgosana cannot do.)

- (4) The Tsau district (population 15,524), under Moshuga, is a little more complex than the others.1 The main groups of people living in it are Kuba, Mpukushu and Herero. The position of the two former is much the same as in Kabamokoni. They are controlled through their village headmen directly by the Chief's Representative. But that of the Herero is somewhat different. These Herero, who were admitted into the country in 1905 as refugees from South West Africa, have a strong culture of their own, and great contempt for their Tawana hosts. These two facts have tended to form them and their cousins, the Mbandieru-Herero, into compact and unassimilated political blocks. They live in small family groups at their cattleposts, scattered about the country, except for two fairly large concentrated settlements at Makakun and Mashun. They have no village-heads of the same type as those found elsewhere; but they recognise, independent of any residential bond, the authority of only two leaders. The senior of these two is Kazonenga, who lives at Makakun; the other is Hijambanye; and their people, wherever they may be living, recognise them as their only heads, receive orders from them, and take cases for trial to their courts. In other words, it is through the senior head, Kazonenga, that Moshuga deals with the 1500 Herero in his district.
- (5) The four districts described above do not cover the whole of Ngamiland; and the areas falling outside them (e.g., the Lake, Toten, Dauga, etc.), comprise what may be called the Chief's district. In point of population (6,088) it is less than half the size of Tsau district, but in organisation it is similar. Its inhabitants are mainly Kuba, Herero,

Teau used to be the Chief's district. When the tribe moved to Maun, many Tawana and others, e.g. Herero, who used to be directly under the Chief, remained behind. As they were now too far away to be controlled by the Chief in person, his relative (next of kin) was sent there as his deputy. Moshuga is the present Chief's paternal uncle (father's younger brother).

Rolong and Tawana. The former live under their own village headmen much as elsewhere, but some of these headmen come under Tawana headmen; and a number of Kuba and MaSarwa serfs come under the authority of their master, and under the jurisdiction of the kgotla to which he belongs.

The Herero (Mbandieru) are organised in much the same way as those in the Tsau district. They too have only two authorities, the senior of whom, Hijaviposa, living at Sehitwa, has such prestige that even those of his people who live at Dauga or at Nkanen (the latter place is in the Tsau area, and both are some eighty miles from Sehitwa) come to him with their cases rather than go to the nearer but alien courts of the Chief at Maun or Moshuga at Tsau.

The Rolong are divided into two small groups living at some distance from Maun. Each of them lives under the nominal control of a headman, but he has in practice neither political nor judicial authority. There is at the moment talk of the two groups being united under the control of a single head, but they remain meanwhile under the immediate authority of the Chief and the jurisdiction of his court.

The Tawana, though nominally attached to Maun, live for the most part at their cattleposts scattered about the country. They all belong to one or other of the makgotla or wards into which Maun is divided, and are supposed to be under the authority and jurisdiction of their wardheads. Many of them actually are; but some of them, aspiring to independence or indifferent to their ordinary obligations, have cut themselves adrift from their wards and claim to be directly under the Chief. The new Chief, however, intends to remedy this state of affairs, and has already begun to insist that each person shall act through his ward-head and, in some cases, return to live in the ward at Maun. The organisation of Maun is described below.

Such then, in brief, is the district organisation of Ngamiland. It is a little simpler than it was before, and on the whole more effective; but there is still lack of contact between the district-heads and their people. Owing to the size of their districts they cannot know more than a small proportion of their people; and in the absence of intermediate headmen, except in the case of the Herero, the Kgalagadi and a few others, they have little control over the more remote village headmen. Bokhutlo overcomes this to some extent by touring his district from time to time, and Moshuga has appointed a weak Representative to act for him in the Swamps. The Chief too in respect of his own district is in much the same position, and there is now some talk of appointing a Representative to take over the Schitwa-Lake area,

ORGANISATION OF THE CHIEF'S VILLAGE

The unique topography of Maun is again reflected in the present organisation of the Chief's village, and is reinforced in this particular instance by the proximity of tsetse-fly. Maun is the principal village in Ngamiland, and it is here that the Chief lives. Like the Chief's village in other Tswana Reserves, it is subdivided into a number of makgotla or wards, each with its own head. Some of these are subdivided into minor wards, and the ultimate unit is the family.¹

The central kgotla is the Chief's kgotla. It is composed of the Chief's near relatives, his retainers (the basekgotso), and their servants. Surrounding it there are the makgotla a basimane ba kgosi, the wards of the batlhanka or basimane. These are fairly small, and consist mainly of the batlhanka, their relations and servants. Beyond these are the wards of dikgosana (royal headmen) and of the badintlha (tribal groups other than Tawana). These are larger than the above, but also consist of the head's relatives and dependants. In all these wards there are also people. or the descendants of people, who on joining the Tawana were assigned to a particular ward. Most of these foreign families are in the latter two types of ward. The more important and the larger of these wards are subdivided into minor wards or have junior wards under them. The boundaries between various makgotla are not clearly defined, but the identity of each can be observed from the grouping and placing of the huts, as all the huts of a particular ward centre round and face towards the kgotla (the court or meeting-place), a palisaded crescent-shaped construction.

This system of ward administration is now breaking down in Maun. For the reasons mentioned above (weakness of past chiefs, the proximity of tsetse-fly, and the straggling nature of the country) many of the Tawana and others who should be living in Maun have scattered, leaving the village with a population of a paltry 600. (Compare this with the 25,000 estimated for Serowe, the Chief's village of the Ngwato). The village is now too small to support such detailed subdivision, and many of the makgotla have dwindled to practically nothing. Indeed the most important one in point of seniority no longer exists as a physical entity. The Chief at the moment is considering the possibility and advisability

² The European term "ward" and the Native term kgotla are here used indiscriminately. The term kgotla, though ambiguous, emphasises the essential juridical nature of these groupings. The term "ward" smacks slightly too much of territorial organization to suit the local units completely, or to describe their members' affiliation. Brief notes on the various wards found in Maun are given below in Appendix I.

of amalgamating some of the smaller and lesser wards, and is also beginning to compel the people to return to Maun and to resume residence in their proper kgotla.

It may be noted that though they may not actually live in their wards, the people still regard themselves as belonging to their old makgotla. But they are often so scattered, living as they do at Toten, Sehitwa, Tsau, Gomare and elsewhere, that they get out of touch with one another and their heads. The ward-heads too in many cases live away from Maun. The headmen are often ignorant of their peoples' whereabouts; and though the latter sometimes still take their cases to be tried by their headmen, many of them ignore their heads and take their cases to the authorities near whom they live. The position represents the disintegration of the old centralised town system, unreplaced as yet by any definite, formulated local village organisation.

COUNSELLORS

There are four categories of counsellors: the basekgotso, the basimane (or bathanka), the dikgosana and the badintha. The members of these groups, because of their close personal contact with the Chief, or because they are the heads of important sections of the tribe, have the right to advise him at any time; their opinions carry weight with the tribe, and they have a right to expect to be called upon to give their advice. The Chief, however, does not limit himself to these people, but asks the advice of his friends and favourites who may, but very seldom do, fall outside these groups. (He usually chooses his friends from amongst the above groups not only because it is right for him to do so, but because through their position he is brought into closer relations with them than with outsiders). Finally, the Chief may take advice from other members of the tribe; and he is supposed to give at least a hearing to any member. who has the theoretical right to come and advise him. Actually at the moment many ordinary members of the tribe (ordinary Tawana and even Kuba, but not MaSarwa) do come to the Chief and proffer their advice and opinions, both publicly in kgotla and privately. These people would not of course be invited to private "inner" discussions which the Chief holds with the leading members of the above groups, except in rare cases when one of these people showed an outstanding grasp of some subject.

The position of the four groups of counsellors can be seen in the lay-out of the Chief's village. At its centre, as previously described, is the Chief's kgotla, i.e. his court, cattle-kraal, and huts, including perhaps

those of his sons and brothers. Immediately behind him and practically encircling him are the *basekgotso*; in a wider circle round them are the *basimane* with their wards, and beyond them again the *dikgosana* and others with their wards and subwards.

The basekgotso (from go gotsa, "to light, or kindle, a fire") are primarily the servants, though not the menials, of the Chief. According to custom, they have to light the fire in the kgotla (whence their name), minister to the Chief, and, in brief, act as his general factorums. In practice it is only the lesser ones, and the Chief's other servants, who do the more humble tasks, the more important basekgotso having acquired certain administrative influence and functions. Thus, visitors to the Chief, or people bringing complaints should, and usually do, go to one of these people, who may hear what they have to say before bringing them to the Chief. Then, as indicated above, members of this group are of the Chief's counsellors, and may include his most important advisers. Modumo, for instance, the present Chief's right-hand man, is a member of this group. These people, however, never have judicial authority, though they may of course help try cases in the ordinary way. The only exceptions are the rare cases where a man's family and personal following have become so large that the Chief allows him to have a kgotla of his own. In this case he drops back a little out of the circle of basekgotso and has his own small ward as a subdivision of the Chief's kgotla.

As their name implies, the basimane or batlhanka also owed their origin to service, though in a different way from the basekgotso. Through being given the Chief's cattle to herd, and in other ways, they eventually acquired kgamêlô cattle, and through this established close relationship with the Chief, and eventually became raised to the position of basimane, were given a kgotla of their own, and had people placed under them. Judicial duties occupied a large part of their functions, and their courts used primarily to be courts of appeal to try cases from other courts. Except in the case of sub-wards of the Chief's own kgotla, all legal suits had first to pass through one or other of these courts before going on appeal to the Chief's court. For instance, cases from Mogadingwana kgotla had to go to Lebodu, whence they might be taken on further appeal to the Chief. Similarly, cases from Mabudutsa went first to Mephako. This function, however, is now dying out, and cases from the dikgosana makgotla are being taken direct to the Chief. The basimane are none the less still important in the tribe, and in a sense it can be said that the chief burden of administration fell on them. The district-heads were almost all drawn from them, and to-day three of the four Chief's representatives are members of this group.

The dikgosana include not only the Chief's relatives but the heads of important Tawana lineages. The latter are usually also connected to the Chief through marriage. Through their birth and position these people, in point of prestige and influence, are second only to the Chief. But until recently, although they had important followings and took a leading part in the deliberations of the tribe, they did not fulfil any important executive functions.

It may be noted too that the peculiar local conditions of Ngamiland have also affected the counsellors. Instead of living in Maun, many of these men have slipped away to their cattle-posts, and now rarely take part in tribal affairs. The extent to which this has happened may be gauged from the fact that of the counsellors recently nominated by the Chief as being entitled to advise him, i.e. those who are or would be the leading members of the tribe, well over a third normally live in the bush.

JUDICIAL ORGANISATION

The organisation of the courts in Ngamiland is simpler than that found elsewhere. As shown in the foregoing descriptions of the political organisation, there are at most only four grades of authority with judicial power. The lowest court is that of the village headman, which is often no more than an advanced and enlarged pub ya lolwapa (family discussion). Above it and with wider jurisdiction there are the courts of important village headmen, of dikgosana, basimane and other ward-heads, and of petty sub-chiefs such as those of the Herero. Then there are the courts of the district Representatives, and finally that of the Chief. Although this represents the maximum range of the local judicial hierarchy, the majority of the people have only one or two courts between them and the Chief's court. (The intermediate position of the courts of the basimane may be disregarded for the moment, for it is ignored at present by the people themselves, and it is not quite clear whether it will be revived).

In actual practice few cases reach the Chief's court. In so far as the Chief's District and Shorobe are concerned, this is mainly because substantial justice is meted out in other courts—in the village and ward courts, and in the district Representative's court. In the case of the other districts, very few appeals are brought to Maun (only three from Kabamokoni in six years), an important reason being the distance to Maun (seven to fourteen days), the trouble and inconvenience involved in reporting the appeal, and then in returning to collect the parties to the dispute for the retrial at Maun,

Court procedure is everywhere very similar. The head of the kgotla usually presides at the trial, and is assisted in hearing the case by the people who happen to be present in the kgotla. There is no special panel of judges or assessors to help try cases, but whoever wishes is allowed to speak and to cross-examine the witnesses, unless of course he is incompetent or is confusing the issue.

Should the president of the court be away, it depends on the type of court who takes his place. In the village or ward courts, should he be away for a long time his next of kin will take his place; but should he merely be away for a day or two, the case awaits his return. No one presides for the district Representatives. Their court is theirs only in their personal capacity, as the Chief's Representatives, and not as the head of any family or village, etc., so they are the only people competent to preside. Occasional exceptions occur. For instance, when Motsewakhumo is away, his brother Ramakoba may hear an urgent case for him. Similarly, Makoko may occasionally help his kinsman Moshuga at Tsau. But in both these instances, should the suit not be settled it has to be retried by the proper district Representative on his return. No one can deputise for either Bokhutlo or Samuel. The Chief's court must stay open the whole time, and when the Chief is away his place is taken by the man next in order of seniority.

Most of the cases dealt with in these courts are civil. But there are a few which might be called quasi-civil, in that a penal fine is often imposed in addition to a civil judgment for damages. These are the usual cases of theft, adultery and so on. The only criminal cases are offences against the Chief or other authority in his administrative or legal capacity.

The distribution of fines here follows the usual lines found elsewhere. The injured party is awarded damages in a civil suit, and penal fines "go to the court." According to the old custom, the latter fines should be used to feed and otherwise reward the court and those taking a leading part in its affairs: beasts should be killed for the court, and an occasional one given to the president or other leading members. The Chief and headmen are however tending nowadays to keep the fines as part of their own revenue. The position of the district Representatives is and has always been slightly different from that of other people. All the revenue they handled was regarded as being the Chief's, and to be accounted for to him. Since they were all kgamêlô holders, this in practice meant that they kept this revenue and therewith fines, to their greater indebtedness to the Chief. This Samuel and Motsewakhumo still do: they keep their fines as kgamêlô, though they occasionally slaughter a beast for the court.

Bokhutlo, however, not being a kgamêlô holder, has to hand his fines over to the Chief, but has the right to expect a few to be returned to him (e.g., last year, of twenty-six beasts taken to the Chief at Maun, eleven were given back to him). Moshuga being the Chief's uncle and therefore having some title to such perquisites, keeps his fines. Moreover, he needs some such source of revenue to enable him to maintain his position.

Apart from the above, Ngamiland offers no exception to the general system of rewards, material and immaterial, and to other points of judicial organisation. One last point may however be mentioned, viz. that at one time it was the practice of a few leading Tawana to wander up and down the country in the remoter districts and hold a rough and ready court to try cases extracted from the local villages as a cover for extortion. This practice has been stopped, but it is an interesting example of the power possessed by a handful of Tawana notables over their subject peoples.

APPENDIX I.

LIST OF MAKGOTLA AT MAUN

1. The Chief's Kgotla. Its leading members are, after the Chief, Gaetsalwe, Moshuga, Disan, and Monnamaburu. The first-named has recently acted for the Chief during his minority, and now acts for him when he is away. Monnamaburu also acted once as Chief. He and Disan now both live at Tsau instead of Maun.

Dikgosana:

- 2. Mogadingwana kgotla. This is the most senior kgotla in Ngamiland after the Chief's. Nevertheless at the moment it does not exist as a physical unit, its court has fallen into decay, and all its leading members live outside Maun, with one exception, and this one lives in another ward and not where the old kgotla used to be. The Chief, however, is trying to remedy this state of affairs, and has ordered the people to return to Maun.
- 3. Mabudutsa kgotla. This at the moment is one of the largest and most coherent of the makgotla at Maun, the reason for its coherence being mainly that its actual head is the wealthiest man in Ngamiland. Its proper headman is Dileriwa, but as he is mentally deficient his place has been taken by his nephew Naledi.

- 3a. Mabudutsana kgotla. A fairly compact subdivision of Mabudutsa.
 - 3b. Gorewaman's kgotla. A small subdivision of Mabudutsa.
- 4. *Mmolai's kgotla*. A small *kgotla*, whose head lives at his Sehitwa cattlepost.
- 5. Gaoretelelwe kgotla. This is not a large kgotla. Gaoretelelwe is one of the tax collectors, and therefore is seldom in Maun. His second in command is also usually out of Maun.

Basimane :

- 6. Lebodu kgotla. This is one of the leading basimane makgotla. Its head, Samuel, is the Chief's Representative at Mohembo, but his place is held by his cousin Gaorewe. His other leading kinsmen live outside, one at Kabamokoni and another at Tsau.
- 7. Mephako kgotla. This is another important kgotla, but like Mogadingwana is suffering from the dispersion of its members. The head until called back to Maun by the Chief lived at Nokanen.
- 8. Segongwane kgotla. Strictly speaking, this should be junior to Mephako, as its founder broke away from his brother, who was head of Mephako. However, the split was permitted by the then Chief, who also raised the status of the new kgotla and placed it on a level with its parent by giving its founder kgamêlô as well. It present head is Motsewakhumo, and it is a large kgotla; but owing to the fact that most of the people have followed Motsewakhumo to Shorobe (where he is the Chief's Representative) it no longer figures in Maun itself to any extent.
- 9. Mephakwana kgotla. As its name implies, this is a sub-division of Mephako and should be junior to it. But it originated in the same way as Segongwane, and though its head, Ramakoba, has certain pretensions to independence, his kgotla is not on quite the same footing as either Mephako or Segongwane, and its size and prosperity are not such as would substantiate its claims. Its members are also much dispersed, and its head lives at present with Motsewakhumo.
- 9a. RraDikgothe's kgotla. This is a small junior kgotla under Mephako.
 - 10. Sephatsa's kgotla, a small unimportant kgotla.
- 11. Diphatsa kgotla. This is a fairly new kgotla started in Sekgoma's time, its founder being a kgamêlô holder of Sekgoma, who gave him the position of headman. Its present head is Bokhutlo of Kabamokoni.

- 12. Matlomo kgotla. This is an important kgotla, still fairly compact.
- 12a. Ndiane's kgotla, a small junior ward.

 Miscellaneous:
- 13. Kebopilwe's kgotla, a sort of sub-ward of the Chief's kgotla, its founder being one of the basekgotso and allowed to have his own kgotla by his Chief.
 - 14. Gaorakwe's kgotla, a small kgotla.
- 15. BaRolong, a moribund kgotla in Maun which is about to be revived.

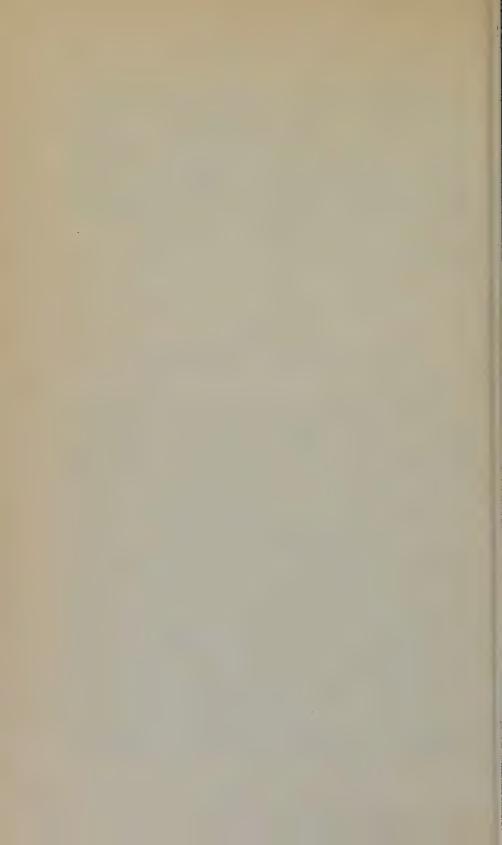
APPENDIX II.

NOTE ON THE KGAMELO SYSTEM

It is a Tswana custom that Chiefs and other wealthy men give to their friends, and to those that ask, cattle and other stock as kgamêlô. These kgamélô cattle can be used as the holder likes: he may use the cows for milking (go gama, root of the word kgamêlô), and the oxen for ploughing and transport; he may even kill or otherwise dispose of his holding, although it is obviously to his advantage not to do so to any great extent. In other words, the holding becomes to all intents and purposes the holder's property, which he treats and uses as his own. So completely does the holder identify this holding as his own, that everything be possesses in his own right also comes to be regarded as kgamêlô. Should he for instance buy cattle with his own earnings (e.g. money earned at the mines, or through hunting), they do not become his own, set apart from the kgamelo holding, but are regarded as part and parcel of it. But this right stops short of absolute ownership, for the donor of the original cattle retains the right to withdraw his kgamelo at any time, not only a number of stock equivalent to the original "gift" plus increase, but everything possessed by the holder, for all such is held to be kgamêlô. other words, should he withdraw his kgamêlô, he would completely ruin the holder. (This complete power has recently been modified by a number of Government decisions, which make it permissible for the owner to withdraw as kgamêlô only a proportion of the holder's property).

Superficially, this appears an iniquitous system. But in practice it worked satisfactorily, for the owner only withdraw his stock when the

holder proved disloyal or failed to respect his obligations, (namely, to help the owner when in difficulties by contributing cattle, etc., to assist him), and the necessity in fact seldom arose. Owner and holder were usually friends, and the former troubled the latter little in regard to the holding. The holder on the other hand through this bond had to be and in fact usually proved to be the owner's keenest supporter. In the case of the Chief, he definitely and deliberately used kgamêlô as a means of securing his followers' loyalty; and all his leading counsellors and friends (the basimane or batlhanka and many basekgotso) were his kgamêlô holders.



TLÔKWA TRADITIONS

F. KRUGER¹

The Tlôkwa whose traditions are here published for the first time in their own dialect² reside in the Northern Transvaal in the Pietersburg and Zoutpansberg Districts. The tribe has split up into two sections which are at present governed by two independent chiefs. The traditions of the two sections concerning several historical events do not agree, and I was accordingly obliged to choose between differing statements.

I use the Standard Northern Sotho Orthography for the convenience of readers who are not acquainted with a phonetic transcription. The dentals are represented by the same signs which are used for these sounds in Venda.

Vowels: $a, e, \hat{e}, i, o, \hat{o}, u$.

Semivowels: y, w.

Consonants:

Nasals: m, n, ny, ng

Alveolars: t, ts, s, (z occurs only in the word Mazula) š, tš

Dentals: d, t

Labials: bilabial p, ps, pš, f, b (fricative)

Velars: x (fricative) after k, h, k, kx

Liquids: r, l, d

h after a symbol denotes aspiration.

Differences between Pedi and Tlôkwa

a. sounds:

Pedi	Tl6kwa	Examples		
œ	h	xama hama to milk, nôxa nôha snake		
(but:	kx kx	kxomo kxomo cattle, kxoka kxoka to bind)		
h^3	kh	lehumo lekhumo riches, humana khumana to find		
ša	sa	causative ending -iša, -isa		

¹ The author is indebted to Professor G. P. Lestrade, Cape Town for valuable assistance.

³ Some of the texts show Pedi influence.

But h f in homola fomola to be quiet.

Pedi	Tlôkwa	Examples					
ši	si	šiya siya to quit					
		kxoši kxosi chief					
		šitwa sitwa to be unable					
ša	sa	šala sala remain					
š61	sô	leš6ka les6ka desert					
še	se	mašemo masemo gardens (Sg.: thšemo thšemo)					
hl	ţh	bohloko bothoko pain, hlaba thaba to pierce					
tl	ď	tlêma dêma bind, tlou dou elephant					
S	ths	senya thsenya to spoil, swana thswana to be equal					
tšwa	kwa	to come forth					
kwa	фwа	to hear					
dira	diya	to do					
b. endings							
locative:							
ng	ene	thabeng thabene on the mountain					
interrogative :							
mang	mane	who?					
eng	ene	what?					
neng	nene	when?					
byang	g byane	how?					
		imperative plural:					
bônai	ng bônan						
., 0,,,,,,,	8						
indefinite pronoun:							
mong	mongw	ê etc.					
		nouns:					
dikxong dikxonye firewood							
mong monye possessor							
		relatives:					
-axo(ang)ane rapêlaxo rapêlane praying							
	eng)ene	rapetsexo rapetsene having prayed					
rapersent rapersent naving prayed							

Influence of Venda on Tlôkwa

It is difficult to explain the origin of the differences between Pedi and Tlôkwa. With regard to the regular change of P.: hl into T.: th,

¹ But so su in soxa suha to rub.

and P.: tl into T.: d I am convinced that we find here the influence of Venda on Tlôkwa. There is furthermore a certain number of Tlôkwa words changed under the influence of Venda or even replaced by Venda words.

Pedi	Tlôkwa	Venda	
(naxa)	lešakô	-shango	country
-tee	-thehe	-thihi	one
mošate	mosata	musanda	capital
(dira)	<i>šuma</i>	shuma	to work
(nyane)	-thoko	thukhu	small
(belêxa)	pêpa	beba	to bear
(monyane)	moratho	murathu	younger brother
(thaba)	thakxala	takala	to be glad
(bolela)	ара	amba	speak
ntlo	ndô	nndu	house
mafsi	mafhi	mafhi	milk
loxa	luha	luka	to weave
(koloba)	ţhapa	ţamba	to be wet
êna	ana	ana	to swear
(boxôbe)	boswa	vhuswa	porridge
homola	fomola	fhumula	to be quiet
~	C .3		

Compare further:

-a xaxwe -ahê -awe 3rd person poss. pron.

See also the notes in the texts.

DITABA TSA BADOKWA

Badókwa e be e¹ sethšaba se seholo. Féla ho be ho se na khutšô hare ha bôna. E be e batho ba bathata, ba meferefere ya ho se fêle. Ka baka la meferefere ya bôna ba ile ba kwa diţhôpha tše dinntši.

Seripa se sengwê sa sethšaba se ile sa doha le kxosi ya sôna Mafesa. Ba aha Moledane. Dithôpha tše dingwê di ile tša ba latêla. Ba bangwê ba ile ba dôhêla hayê² ha bôna ka baka la ho se dwane le kxosi ya bôna Maimêla. Ba bangwê ba fithile hôna mowe ka ho etêlana le banababô bôna. Ba latêlwa ke banenyana³. Ka baka lewe Mafesa ya ba kxosi e kxolo.

Féla Badokwa ba Mafesa ba be ba dula lesokene. Ka baka la ho thôka meetse, ba ile ba doha ba y'o aha ha Dikxale. Ba fitha Dodupe. Hê ba e hôna mowe, Mafesa a hwa; ho sala Mosima.

Mosima o ile a aha Morebene. Ka bohosi o ile a latêlwa ke Thšaka le Khunwane. Badôkwa ba ile ba lwa le Batswêda, ba ba fênya.

Methene ya Mabeba, morwa wa Khunwana, Badôkwa ba be ba lema masemo le ho thokomêla methape ya bôna. Ba ile ba phela khuthšone ba ntšifala.

Mabeba o ile a dohêla nahahê, a ya boţhwatšatši,⁴, a e no moratho wahê⁵ ngwana wa bômmahê, Ramokxopa le Thabola. Hê ba boya Bokxalaka Thabola a sala. Hoba⁶ Thabola o ile a sala Bokxalaka ho no seka mo komanene ya Badôkwa se se reho: "Ra nyoha⁷ noka, ra leba Bokxalaka; ra re re boya ho sala Thabola."

Hê ba bwile Bokxalaka, ba aha Mabyanene. Ngwana wa Mabeba, Thserane-a-Mabyanene, e be e monna wa sethoho le mothabani yo moholo. O be a re hê a sepela le batho nahene, a re ho khumana mothala wa thšukudu a re: "Mo ho diyile mane? Hê ba do mo thakxatša ba re: "Ho diyile 'ngatha -a-bê-Sêwêla!'"

¹ P. (= Pedi) e be e le.

² P. xae;

P. hasetsana;

⁴ P. bosôbêla-tsátsi (ko thwa-P. xo hlwa).

P. monnaxwe.

P. xore.

P. sela.

P. thabiša.

P. thlake.

THE HISTORY OF THE TLOKWA

The Tlôkwa were a large tribe. But there was no peace amongst them. They were fierce people with never-ending quarrels. Owing to their quarrels they split up into many groups.

One part of the tribe left with its chief Masesa. They built Molefane. Other groups followed them. Some left their home, because they did not get on with their chief Maimela. Others arrived there to pay a visit to their relatives. They were followed by girls. So Mesesa became a mighty chief.

Now the Tlôkwa of Mafesa lived in a desert. Having no water they left and settled at Dikxale. They came to Bodupe. Whilst staying there Mafesa died; and Mosima remained.

Mosima built Morebene. He was succeeded in the chieftainship by Thšaka and Khunwana. The Tlôkwa attacked the Venda and defeated them.

During the reign of Mabeha, the son of Khunwane, the Tlôkwa cultivated their fields and took care of their herds. They lived in peace and multiplied.

Mabeba left his country and went to the West together with his younger brother Ramokxopa a son of his own mother, and with Thabola. When they returned from Rhodesia, Thabola remained there. There is still a tradition in the circumcision-school of the Tlôkwa that Thabola had remained in Rhodesia, and which states: "We crossed the river we journeyed in the direction of Rhodesia; when we returned, Thabola remained."

When they had returned from Rhodesia they built Mabyanene. The son of Mabeba, Thserane-a-Mabyanene, was a cruel man and a great fighter. When he roamed in the country with his followers and came across the footprint of an rhinoceros, he used to say: "Who made this?" When they wanted to please him, they said: "It was the hoof of one of the family of Sewêla" (i.e. he himself).

¹ In the Pietersburg District.

^{* (}see 1).

^{*} Near Zoekmakaar.

Near the Dwars River.

⁸⁻¹⁰ In the Pietersburg District.

Bômma-Thserane ke ngwana-Kxokoloha. Mosadi wa Thserane yo moholo ke ngwana-Kxwale. Ke yêna wa ho pêpa Kxwadu. Bohosi bya Kxwadu e ile ya ba byo boholo. A lwa le Batswêda a ba fênya. A busa naha kamoka ho doha Makotopone ho isa Madyabyê le ho doha ka noka ya Moeketsi le ya Lethaba ho fitha hu Sekxôpo le Sekxosêse.

Ka lebaka le lengwê a fapana le Mosibudi kxosi ya Moletši. Ba ile ba fapana ba e merakene, ba baka bothaka. Ba thola² ntwa hare ha dithšaba tša bôna. Kxwadu a fênya ba Moletši. Mosibudi a bolawa ntwene ye. Ke mo Kxwadu a ilêho a ithea leina a re: "Ke nna Kxwadu. Athama re ho bonê hanone. Re bone dikxalahala³ tša ho metša Moloto le Pohopedi-a-Mothokwa. Mosadi yola, mma-Mosibudi-a-Moloto o ile mala 'tšididi,' o iphofile letswa⁵ la kxokone. O re: Lesôla le, Kxwadu, ke le isa kae? Hê ke rua dikxomo a da a thakola; hôna le thari ya batho a dile u e tšea. Mohatša Leuba, mathsenya6 ka kxole. Tswêda le Moletši a tswebêra!"

Moraho ha lehu la Kxwadu ho a sala ho busa mohumahadi wahê Mmadibatswana, ngwana-Raphathêlo, ka hobane morwa yo moholo Lešwone o be a hwile e seye⁸ mothankana.

Kxwadu o be a e noo⁹ barwa ba banntši, ke Morwakxwadu le Monthšo le Ngwako le Modalahôthe le Molamo le Sebataolo le Mosima le Makaepea le ba bangwê ba ba bolailwene e seye bana.

Morwakxadu o be a nyatša pusô ya mosadi. A dula motsene wahê kua Sekakene. Madibatswana le banna ba beho a dutše nabô Mabyanene ba ile ba rêra ho biletša Morwakxwadu Mabyanene hore a dulê hôna. Fêla a hana. Ka lebaka le lengwê ba mmilêtša merêrô. Hê a e seye Mabyanene ba nthša dira tša ho hula motse wahê kua Sekakene. Ba bolaya batho, bangwê ba ba hobatša, Ba thopa dikxomo ba di isa Mabyanene. Hê di fitha Mabyanene ba re ho Morwakxwadu: "Nthša tša hahô!" A re: "Kamoka ke tša ka, ke be le ba fisitše!"

¹ P. ba e le;

² P. tsoša

³ P. maxalapa

P. tsirr (onomatopoia)

⁵ P. lezwa (borrowed from Setebele) P. lerala;

P. masenya;

⁷ Unknown origin;

P. e sa le ;

P. o be a na le.

The mother of Thserane was a daughter of Kxokoloha. The great wife of Thserane was the daughter of Kxwale. She gave birth to Kxwadu. The reign of Kxwadu was a great one. He fought with the Venda and defeated them. He ruled over the whole country from Makotopone to Madyabyê and from the Moeketsi River and Lethaba River to Sekxôpo and Sekxosêse.

One day he quarrelled with Mosibudi the chief of Moletši. They started quarrelling when they met at the cattle-posts, they disputed about their relative seniority. They caused a war between their people. Kxwadu defeated the Moletši. Mosibudi was killed in the fight. It was on this occasion that Kxwadu composed his praise-name; he said: "I am Kxwadu. Open (the mouth) that we may look into the throat. We want to see the gullet which swallowed Moloto and Pohopedi-a-Mothokwa. That wife, the mother of Mosibudi-a-Moloto, tied up her bowels, she tied herself with a strap of gnu-skin. She says: This sorcerer Kxwadu, what shall I do with him? When I breed cattle, he comes and robs; he came and fetched even the foetus of the people. He the husband of Leuba, the destroyer on purpose, he says: 'Venda and Moletši are without peace.'"

After the death of Kxwadu there remained his wife Mmadibatswana, the daughter of Raphathêla, to succeed on the throne, for the "great son" Lešwone had died while still a little boy.

Kxwadu had many sons, namely Morwokxwadu, Monthso, Ngwako, Modalahôthe, Molamo, Sebataola, Mosima, Makaepea and others who had been killed while they were children.

Morwakxwadu despised government by a woman. He was living in his village at Sekakanene. Madibatswana and the men with whom he was staying at Mabyanene planned to call Morwakxwadu to Mabyanene that he might stay there. But he refused. One day they called him to a discussion. While he was there at Mabyanene, they detached a troop of soldiers to ravage his village at Sekakene. They killed some people, and wounded others. They stole the cattle and brought them to Mabyanene. When they arrived at Mabyanene, they told Morwakxwadu: "Pick out yours." He said: "All of them are mine; I had lent them out."

A dula Mabyanene a se a rate.¹ () be a ya a bôna dikxobadu³ tšahê Sekakene. Ba ile ba fôla, a doha busihu⁸ mo Mabyanene, a thopa dikxomo a doha natšô le batho bahê.

Banna ba Mabyanene hê ba e dwa hore Morwakxadu o dohile le dikxomo o tšere le marumô ba fyêha⁴ ho mo latêla ka baku la ho tseba bohale byahê. Ke hôna a doha le ba motse wahê a ya Moletši.

Hê ba e⁵ Moletši merakene ha kwêlêla Mazula. Morwakxwadu a lwa nabô a thšaba le dikxomo a y'o aha Moeketsi. A nthša seripanyana sa dikxomo a y'o fa kxosi ya Moletši.

Ka lebaka le lengwê Mazula a fiţha Mabyanene. A lwa le batho ba Madibatswana, a ba tšeêla dikxomo. Hê masohana a e dwa hore Morwakxwadu a bene hôna a noo dikxomo tše dinntši ba dohêla mohumahadi, ba ya ho Morwakxwadu. Hê Morwakxwadu a bôna hore Madibatswana ha a sa na batho a khuduha, a ţhabana le mohumahadi, a mo fênya. Ke hôna Madibatswana a thšabêla Matebelene. Morwakxwadu a sala e⁶ kxosi. Ya ba kxosi e kxolo. A lwa le Mazula, a ba fênya ha nntšinntši. Hê ba rêta leina lahê ba re: "Ke Morwakxwadu, mmamafêtša dilêma. O hana nnywane (thšukudu ya seţhôle) Maokxwe di fula. Mosima, tsôḍa, le šoţhile sakene. Ke lerumo la Mabyanene takumi. Rrakxomo, di kxadwa šakone, di kxadwa kua melalene dithšêţhone."

Ka lebaka le lengwê Mazula a lwa le Morwakxwadu, ba mo fênya. A kukwa ke Mmotwane, a fêla maada. Bofêlone a ineêla ho manaba. A kxokwa ka matswa, a dula a disitšwe ke baţhabani ba babedi. O be a dula a rata ho kxaola matswa a mo kxokilene. A kxaola matswa, a tšea lerumo la moţhabani yo mongwê, a lwa le ba ba batamêlaho ba rata ho thusa. A ţhabya ka marumo a lesome a hwa.

¹P. a sa rate;

² Not formed in P.

P. e sa le bosasa; P. bosexo = T. busihu.

⁴ P. boifa.

P. Xe ba le-

P. e le-

⁷ F. xopola (?)

P. šwahlile;

P. moraxo

¹⁰ P. thuša

He stayed at Mabyanene against his will. He went to see his wounded (men) at Sekakene. They had recovered; so he left Mabyanene early in the morning, fetched (his) cattle and left with them and his followers.

When the people of Mabyanene heard that Morwakxwadu had left with the cattle and had also taken warriors with him, they were afraid to follow him for they knew his bravery. So he left together with those of his village and moved to Moletši.

When they were at the cattle-posts at Moletši, the Zulu appeared. Morwakxwadu fought with them, then he fled with the cattle and settled down at Moeketsi. He gave the chief of Moletši a small part of the cattle.

At another time the Zulu came to Mabyanene. They fought with the people of Mmadibatswana and took their cattle away. When the young men heard that Morwakxwadu was staying there with many cattle, they left the chieftainess and went to Morwakxwadu. When Morwakxwadu saw that Mmadibatswana had no people, he moved off, came to Maehangwa, mobilized his troops, attacked the chieftainess and defeated Then Madibatswana fled to the Matebele. Morwakxwadu remained as chief. He was a great chief. He fought with the Zulu and often defeated them. When they praise his name, they say: "This is Morwakxwadu, the destroyer of cattle with crooked horns. He does not allow the young rhinoceroses to graze at Maokxwe. He does not allow them to long for the pasture-grounds at Molemole. Mosima, ruminate! it (the spear) jumped out of the kraal. It is the spear of Mabyanene, the sparkling (?). I the lord of the cattle—they are struck through the anus, they are struck on the neck (while) in the thorns." (?)

At one time the Zulu fought with Morwakxwadu and defeated him. He was picked up by Mmotwane entirely exhausted. Finally he surrendered to the enemy. He was bound with straps and was sitting guarded by two soldiers. He wanted to untie the straps with which he was bound. He broke the straps, seized the spear of one warrior and fought against those who approached to assist. Pierced by ten spears he died.

Ka moraho ha lehu lahê mohumahadi Madibatswana a boyêla hayê, a busa. Fêla mohumahadi ha a ka a ruta bana bahê ho thomphana le hore yo moholo ke mane. Ka mokxwa wo ba hola ba nyatšana. Hê mohumahadi a hwile kxosi ya ba Molamo. Ngwako-a-Marêma le Monthso ba hana ho buswa ke Molamo. Ha tsoha mpherefere. Ya ba ntwa ye e nyakilene ho thsenya sethšaba sa Badôkwa kamoka. E ile ya tšea mengwaha e mentši. Mafelêlone ba mosata ba fênya. Monthso le Ngwako ba thšabêla Moletši. Bu rapa ba Moletši hore ba ba thusê.

Kxosi ya Badókwa ya sala e Modalahôthe, morwa yo mongwê wa Kxwadu. Ngwako-a-Marêma a hopêla¹ ba Sekxobokxobo hore ba mo thuse ntwene yahê le Modalahôthe. Ba dumêla, ba fênya Modalahôthe ka dithunya, ba mmolaya le baholo bahê.

Ngwako ka ho thšaba hore Badôkwa ba ka mmolaya o ile a thšabêla Tswêda. Kxosi ya sala e² Sebataolo. Ke hôna ba rêra ho bolaya Ngwako. Ba mmitša ka maanô. Ba re : " Maburu a rata ho ho bea kxosi ya Badôkwa Ngwako a doha, a ya Matseke ba mo thakxalêla kudu.

Ka lebaka le lengwê ba rêra morêrô wa hore re mo isa Tswêda, a y'o bonwe ke Makxowa. Hê ba fitha nokene ya Mononono ba re ba thapa maatho, Sebataola a tšea lerumo a thaba Ngwako a mmolaya. Ke hôna ho tsoha ntwa. Ba Sebataolo ba bolaya ba Ngwako.

Sethšaba sa doha sa ya Maubene. Sebataolo yêna a ya Bolobedu. Kamoraho a latêla sethšaba Maubene. Hê kxosi ya Mauba, Sekwati. a e dwa hore Sebataolo o bolaile Ngwako-a-Marêma a mmutšisa³ a re: "O ile ho ţhaba monnaheno ka lerumo a rene?" A re: "O ile: ke ţhabya ke wêna, Matome?" A mmutšisa hape-hape a re: "Na leina le O be a ke a ho bitši ka lôna na?" A re: "Awa! ke la byana." A re ho yêna: "O bolaile, O ka se ke wa phela ha leêle."

Moraho ha lehu la Sebataolo ho be ho busa mohumahadi wahê Mainamêla, ka hobane morwa o moholo wahê Setheba e be e monthoko. Mainamêla ha a ka a dula sebaka se seleêle kua Maubene. O ile a homêla hayê, a y'o busa hôna. O be a noo morwa o thehe Letheba le barwedi bababedi

¹ P. kxopêla;

² P. e le Sebataolo ;

P. mmotšiša;

⁴ P. letelêle ;

F. e be e le e monyane;

P. o be a na le;

After his death the chieftainess Mmadibatswana returned home and ruled. But the chieftainess did not teach her children to have regard for each other, and she did not designate the "great one." Thus they grew up and despised each other. When the chieftainess died, Molamo became chief. Ngwako-a-Marêma and Monthšo refused to be ruled by Molamo. A dispute arose. It developed into war which nearly ruined the whole Tlôkwa tribe. It lasted for many years. Finally the chief was victorious, Monthšo and Ngwako fled to Moletši. They asked the Moletši to help them.

Modalahôthe, another son of Kxwadu, became chief of the Tlôkwa. Ngwako-a-Marêma asked the Sekxobokxobo to help him in his fight against Modalahôthe. They agreed and defeated Modalahôthe with guns. They killed him and his councillors.

Ngwako, fearing that the Tlôkwa would kill him, fled to Vendaland. Sebataolo became chief. So they plotted to kill Ngwako. They called him back on the plea that the Boers wanted to make him chief of the Tlôkwa. Ngwako left and went to Matseke, where they paid him high honour. One day they wanted to bring him back to Vendaland so that he might be seen by the Europeans. When they arrived at the Monononol River, they said they wanted to wash their eyes, but Sebataolo seized his spear, stabbed Ngwako and killed him. A fight arose, and the followers of Sebataolo killed those of Ngwako.

The tribe moved off and went to Mauba. Sebataolo went to Loveduland. Later he followed the tribe to Mauba. When the chief of Mauba, Sekwati, heard that Sebataolo had killed Ngwako-a-Marêma, he called him and said: "When you killed your brother with the spear, what did he say?" He answered: "He said: Is it you who are killing me Matome?" He asked him again: "Was that the name by which you were called?" He said: "No, it is the name of my childhood!" He told him: "You have killed, you will not live long."

After the death of Sebathaolo his wife Mainamêla became chief, because his eldest son Setheba was still a child. Mainamêla did not stay long at Mauba. She returned home and reigned there. She had only one son, Letheba, and two daughter, Dikonkêtšô and Ledile. Dikonkêtšô

¹ Dwars river.

Sekhukhuniland.

Dikonkêtšô le Ledile. Dikonkêtšô e be e¹ mohumahadi wa kxosi Makxatho. Ledile o ile a tšewa ke moratho wa kxosi Ramokxopa.

Hê sethšaba se ile Maubene, kua Mphakane ha sala ho busa Mosima. A setše le sețhopha se sengwê sa sethšaba. Hê ba boya Maubene, Ramokxopa a re o ya Madiyêhe mo a beho a dula hôna pele ha hê ba ya Maubene. Ba mosata ba hana. Ba re: "Dula le rena, o re ledise bana ba rena Mokoto le Letheba." Ke hôna Ramokxopa a dula. Mokoto ka baka la ho tseba xore Lethane yo ke yêna kxosi, a mo fa midi² ya diţhare, ya mmolaya. Ke hôna ho tsoha phapanô. Ba mosata ba lwa le ba-Mokoto, ba mo thswara ba mmolaya.

Ka moraho ha lebaka ba mosata ba se sa dwana³ le Ramokxopa. Hê a be le leêtô la ho ya Ha Letswalô ba mosata ba sala ba diya mpherefere ba lwa le ba-Ramokxopa Komanene. Ba mosata ba fênya ba Ramokxopa. Meferefere ye ya kwêla pele. Ba se sa rêrišana ditaba tša ka hayê. Ke hôna Ramokxopa a doha a boyelêla Madiyêhe a y'o aha Mokomene. Ba mosata ba hana ho fa Ramokxopa mabêle a bôna a beho a e ka disihune. Ba Ramokxopa ba nthša pholo ba loba. Ba roma Makolomêtša hore a y'o ba hopêlêla mabêle a. Ba mosata ba re: "Re fene Moloko-a-Mmamaţha, e be mosadi wa rena, hôna re do le fa mabêle."

Ke hôna a re ho bôna: "Hê ho e byalô hôna: 'Thšukudu e do kxêda Maebanene!'" Ka moraho ba mosata ba da ba thopa dikxomo tša Madiyêhe. Ke hôna hê ho thomêha ntwa ya marumô. Ba Mathšaka ba dikiswa ke Raphathêlo, Phôôkô le Ratsaka. Ramokxopa a dikiswa ke Makxatho. Ba Moletši le hê ba be ba re ba dile ho dikisa Ramokxopa ha ba a ka ba kxôna. Ba Mathšaka ba ile ba ba fênya.

Hôna mo ntwene ye -ntwa ya Mabye-a- Nkate -e ile ya ba bothoko kudu ka maada. Ba Ramokxoka ba bônthša maada ntwene ye, ba fênya ba Mathšaka.

Ka sebaka se ho be ho busa Maburu nahene. Hé Mathšaka a bôna hore Ramokxopa o ya mo sita, a y'o beha taba ye ho Maburu. Ke hôna a bitša Mathšaka le Ramokxopa hore ba fedisê ntwa ya bôna. Ka moraho hwa diwa mellogne hare ha dikxosi tše pedi tše.

¹ E be ele ;

² P. medu:

³ P. ba se ke ba hlwe ba kwana;

⁴ P. unknown, Southern Sotho;

became the "great wife" of Chief Makxato, Ledile was married by the younger brother of Chief Ramokxopa.

Whilst the tribe had gone to Mauba, Mosima had remained as ruler at Mphakane. He had remained with one part of the tribe. When they returned from Mauba, Ramokxopa wanted to go to Madiyêhe where he had been staying before they moved of to Mauba. The chief refused, and said: "Stay with us, mind our children for us Mokoto and Letheba. So Ramokxopa remained. Mokoto knowing that Letheba would become chief, gave him (poisonous) roots of trees and killed him. So a quarrel arose. The followers of the chief fought with those of Mokoto; seized him and killed him.8

After some time the chief quarrelled with Ramokxopa. When he was paying a visit to Letswaloland, the chief started to quarrel with the followers of Ramokxopa at Komanene. The followers of the chief defeated the followers of Ramokxopa. The enmity increased. They no longer discussed their domestic affairs. Therefore Ramokxopa left and returned to Madiyêhe; he founded Mokonene. The chief refused to give the followers of Ramokxopa their corn which was in the cornbaskets. The followers of Ramokxopa sent an ox to make peace. They sent Makolomêtša to ask for the corn. The chief said: "Give us Moloko-a-Mmamatha to be our wife, then we shall give you the corn."

But he told them "If that is the state of affairs then, 'The rhinoceros will run to Maebana!'" Later the followers of the chief took the cattle of Madiyêne. That was the beginning of the war. The followers of Mathšaka were assisted by Raphathêlo, Phôôkô and Ratsaka. Ramokxopa was assisted by Makxatho. The people of Moletši who wanted to help Ramokxopa were unable to do so. The followers of Mathšaka defeated them.

This war—the war of "Mabyê-a-Nkate"—was a great disaster. The followers of Ramokxopa showed their strength in this war, they defeated the followers of Mathšaka.

While this happened the Boers were governing the country. When Mathšaka saw that Ramokxopa would conquer him he made an appeal to the Boers. So they called on Mathšaka and Ramokxopa to put an end to their quarrel. Later a boundary-line was fixed between the (territories of the) two chiefs.

Next to the throne were Rampo Mathšaka and Masanyana Mathšaka (here called Mathšaka). Rampo became a Christian and renounced the chieftainship.

[&]quot;I shall fight with you"

Muthšaka o be a se a rate ho nthša mothêlo¹ wa mmusô. A dohêla naha ya habô a khuduhêla Tswêda.

Mosima a sala Mphakane, Ramokxopa a dula nahene yahê a fiwa naha e kxolo.

Ba ha-Mathšaka ba boyêla Bodôkwa hê babašweu ba thôma ho lwa le Ramapulana kxosi ya Batswêda. Le bôna ba fiwa naha, fêla e be e nthoko.²

Ka lebaka la lehu la Mathšaka morwahê Kxarara e be e seye yo monţhoko. Mathšaka a laêla hore Ionathan Mathšaka, morwa wa Rampo Mathšaka ngwanabô kxosi Mathšaka wa mosadi e mongwê a busê ho fiţha hê ngwana a hodile.

(Rampo ke yo a kolobeditšweho ke moruti Knothe kua Wallmannsthal. Rampo a thôma ho ruta Sekonye, a na le mosadi wahê Helena.)

Ionathan o ile a suma³ ditaba tsa ho athola melato mo mosata. Féla Mmamosima, mma-Kxarara o be a lwa le taba yewe, a rata ho busa ka noosi. Sethsaba se arohana diripa tse pedi ka baka la taba ye. Ba bantsi ba êmêla Ionathan.

Kxarara o ile a tšena sekôlo sebakanyane. Fêla hê a bwile komene a lêsa, le hê Ionathan le sethšaba ba be ba rata hê a e ka ba le thutô ye detšene.

Ba Rrangwane ba Ramokxopa—kxosi ya bôna e be e Mamokutupi II hế ba khuduhêla Mokomene. E ile ka ngwaha wa 1914 Mamokutupi II a hwa. Ho a sala ho busa Tabudi. Yêna o ile a tswala Masedi. Masedi a tswala George.

Mo sethšabene sa Ramokxopa lentswe⁴ la Modimo le thomilwe ke mohu Nathaniel I. Ramokxopa, papahô mohu Nathaniel II, Mamokutupi Ramokxopa, yo mongwê wa ba ba ileho ba kxêthwa ka 1926 ho ba baakomedi ba dikôlo.

Sethšaba sa Ramokxopa se khuthšone, a ho na meferefere mo hare ha sôna.

P. mothšélô derived from xo thšéla T. ho thšéla.

P. e be e le e monyane;

P. dira?

⁴ P. lentšu.

Mathšaka did not like to pay the Government tax. He left his country and went to live in Vendaland.

Mosima remained at Mphakane. Ramokxopa remained in his own country and was given a large location.

The followers of Mathšaka returned from Vendaland when the white people began to fight with Ramapulana the chief of the Venda. They were also given a location, but it was a small one.

When Mathšaka died, his son Kxarara was still a boy. Mathšaka ordered that Jonathan Mathšaka, the son of Rampo Mathšaka, a brother of Chief Mathšaka from another wife, should reign until the child had grown up.

(Rampo had been baptized by Rev. Knothe at Wallmannsthal. Rampo started to preach at Sekonye, his wife was Helena.)

Jonathan had carried on the government. But Mmamosima, the mother of Kxarara, opposed this regency, she wanted to rule herself. The tribe split into two sections on account of this quarrel. The majority was on the side of Jonathan.

Kxarara attended school (the Mission-school) for a while. But when he returned from the circumcision-school, he discontinued this, although Jonathan and the tribe wanted him to have a thorough education.

As for the followers of his uncle—the Ramokxopa people—their chief was Mamokutupi II when they settled at Mokomene, coming from Mphakane. In 1914 Mamokutupi died. Tabudi became chief. He begot Masedi. Masedi begot George.

The Gospel was first preached among the people of Ramokxopa by the late Nathaniel I, Ramokxopa, the father of the late Nathaniel II Mamokutupi Ramokxopa, who was one of those who had been appointed supervisors of schools in 1926.

The tribe of Ramokxopa lives in peace, there are no quarrels among the people.

¹A village near the chief's kraal in Mathsaka's location.

BYALI1

Byali ke kxobokanô ya banenyana hore ba rupê.² Ke mokxwa wa rena Badôkwa ho rupêtša bana ba basimana le banenyana. Hê ngwana yo mongwê a se a rupa, re re ke lešoboro, ke hore ha a na kopanô le ba ba rupilene. Ha a dumelêlwa ho sepela nabô. Ha eso ya ba mosadi ho fithêla hê a rupa.

Banenyana ba diya dithôpha mo motsene, ba tsoha e seye ka busihu ba opêla ba biina. Hê ba diya byalô ba re byali bo ya kôḍa. Hê byali bo dutše bo kôḍa ba ba bônthša dikôma tša basadi. Kôma ye e diwa ke bakxekxolo le basadi ba baswa. Bôna ba tseba dikôma tše. Hê banenyana ba leka ho thšaba, ba ba hapelêtša, ba ba tiya hore ba ḍwaêlê dikôma tše.

Kamoraho ha sebaka byali bo diya sethôpha se thehe se seholo mo motsene o moholo. Moono byali bo thakana Ha-Thôka. Hôna mo motsene wo ba diya kôma. E diwa ke banna, ba diyêla basadi. Ba tšea monna wa ho kxwatha, ba mo lokêla ka tene ha mokôda wo o luhilwene ka byanye. Hê motho a ka tene o ka se ke wa lemoha hore ke motho. O luhilwe ka bothakxa byo boholo le thokomêlô. Kôma ye ba re ke "Phôôfôlô."

Phôôfôlô ye e e da e kwêlêla e biina, e da lebakene la hê kxwedi e kxanya. Ho e bina ba re : "Phôôfôlô e a thaka." Ho e bina ba e opelêla. Banenyana ba ha ba botšwe hore ke motho.

Banenyana ba ba dya ka mahayê abô bôna, e se ka busihu⁵ le mantšeboya. Ba re ho dya mantšeboya ba homêla kosêne ba lala ba opêla busihu kamoka. Ba diya byale ho fitha hê byali bo aloha.

Phôôfôlô ye e thswanetše ho dula e thapile. E thapiswa ke banenyana. Bu ya ba e kxêla meetse. Meetse ba re ke: "Malalakwêna." Dikxonye ba re ke: "Marapô."

Hê byali bo e sa rupa, a ho na yo a dumelêlwane ho tšea. Hê a e ku tšea o do lefiswa, a nthša dikxomo a fê kxosi. Hê motho a e ka lwa le mosadi wahê, Phôôfôlô e do mo opêla ho fiţhêla a lefa. Ke nyatšêhô e kxolo kudu hê motho a e ka o opêlwa ke Phôôfôlô. Ka lebaka le batho ba itôta kudu ka maada.

¹P. the custom of a circumcision school for girls is unknown. byali Venda: Hali.

² P. unkown, the term used in P. is bolla.

³ P. unknown, Venda term.

P. loxa T. luha.

⁵ P. e sa le bosasa.

P. e kolobile.

" BYALI"

"Byali" is the gathering of the girls for the purpose of initiation. According to the custom of us Tlokoa-people boys and girls are initiated. If a child is not initiated, we call him "lešoboro" (uncircumcised), i.e. he has no communion with the initiated. He may not walk with them. He will have no wife unless he is initiated.

The girls live in troops in the village, they rise early in the morning and sing and dance. When they are doing so they say: "The initiation-school has gathered." When the school is going on, they show them the tests of the women. This school is held by the old and the young women. They know these tests. If the girls try to run away, they compel them, they beat them so that they may undergo these tests.

After some time the school is converted into one big gathering in a large village. The school meets at Thôka¹. In this village they perform a special rite. It is done by the men, they do it for the women. They take a strong man and put him into a woven grass bag. When the man is inside, one does not know that there is a man. It is woven with the utmost neatness and care. This rite is called "the wild animal."

This animal comes forth dancing, it appears at the time when the new moon begins to shine. In praising it they say: "The wild animal is suffering. (?)" In praising it they sing to it. The girls are not told that it is a person.

These girls eat in their homes in the morning and evening. After the evening meal they return to the choir, they sit down and sing during the whole night. They do so until the school breaks up.

That animal must be kept wet. It is wetted by the girls. They go and fetch water for it. The water is called "malalakwêna."—(The firewood is called "marapô.")

As long as the school lasts, nobody is allowed to marry. If any one marries he is fined, he must pay cattle and give them to the chief. If anyone quarrels with his wife, the wild animal will address him in song until he pays a fine. It is a great disgrace if a man is addressed in song by the wild animal. During this time people are very careful to give no trouble.

¹ Name of a village.

Hê motho a ka da matšatši a mararo hana¹ a mane, pele ha byali bo aloha, o do no thswana le ba ba feditšene dikxwedi tša ho thselêla² ba rupa. Fêla hê a rupile byalô, ba re o tšere "dopu."

Hê byali bo aloha ba ba fa moanô³. Ba ka no ba bitša "Maphaswa" hoba "Madingwana", hoba "Mahakwa." Ba ba fa moanô ka basimana ba thaka ya bôna.

Banenyana ba ba rupisa byale : ba ba haya dirope tše ho isa thoko ya dithswar6 le ho isa pele kxaufi le ma6.4

Yo mongwê le yo mongwê yo a rupilene o thswanetše ho nthša pudi. Yôna tefô ye ba re ke thatse. Dithatse tše di fiwa kxosi. Ka moraho ke hôna hê byali bo alohile.

TŠEISO

Ditaba tša tšeisô di apiwa⁵ ke batswadi ba bana. Batswadi ba lesohana ba dwana le batswadi ba ngwanenyana. Hê ba dwane byalô batswadi ba ngwanenyana ba nyaka motho. Motho yo ba re ke "Mmaditsela." Le babô lesohana ba nyaka "Mmaditsela" wa bôna.

Byale babô mositsana ba romêla mmaditsela yola wa bôna. O isa dithêbele tša difôla ka habô lesohana. Ke hôna a dohêla dithêkxwe tšeo ka habô lesohana. Byale moţha dithêkxwe di boya di boya le pudi. Pudi yeo e bitšwa hore ke a dithêbêle.

Ke hôna hê dilo tšeo di diyilwe babô lesohana ba a rêra byale ba nywalê⁹ ba nthšê dikxomo tša ho tšea ngwanenyana yeo. Ke hôna ba nthša dikxomo tše di selêlaho. Dikxomo tšeo di na le maina a tšôna a ho nywala.

Kxomo ya pele e na le namane ya pholo. Ba re: Ke "tswetši ya kxôrone." Ke hore ke yo e leho ya papahê. Kxomo ya bobedi ke "tswetši ya mošene," 10 ke hore ke yo e leho ya bômma a ngwanenyana.

Ka moraho ho kwa kxomo le namane, yôna e bitšwa hore ke " sesupô sa kxôro." Ke ya monna le yôna numane ya yôna. Ke " mmahô ditswetši,"

¹ P. xoba.

² P. tše di selêlaho.

P. kênô from xo êna; moanô from ho ana Southern Sotho.

⁴ Unknown in P., Choana.

P. bolêlwa.

P. unknown.

⁷ P. motšoko.

⁸P. unknown.

P. nyālê.

⁷⁰ P. lapeng.

If anyone enters the school three or four days before it breaks up, she is just like those who have been five or six months to become initiated. But after such a person is initiated, they say "she wetted only her hand."

When the school breaks up, they give them a special name. They may call them "Maphaswa" or "Madingwana" or "Mahakwa." They give them the same name as the boys of their age-class.—

The girls are initiated in the following way: they make incisions in the thighs where they form the laps, and further near the vulva.

Everyone who is initiated must pay a goat. This fee is called "witness." These "witnesses" are given to the chief. Then the school breaks up.

MARRIAGE

Marriage affairs are discussed by the parents of the children. The young man's parents come to an agreement with the girl's parents. When they agree, the parents of the girl get a person. This person is called "the mother of the roads." The family of the young man gets also their "mother of the roads."

Now the family of the girl sends off its "mother of the roads." She carries small bags² with snuff to the young man's family. Then she leaves these bags behind at the residence of the young man's family. When the bags are sent back, they are sent back together with a goat. This goat is called that of the snuff-bags.

When this has been finished, the young man's family makes a plan to contract the marriage by giving the marriage-cattle for that girl. So they give six head of cattle. These cattle have their names with reference to marriage.

The first one is a cow with a bull-calf. They say: she is "the cow of the owner of the door," i.e. she belongs to the father. The second cow is, "the cow of the owner of the house: "i.e. she belongs to the mother of the girl. Then a cow with a calf is given, which is called: "pointer of the door." She belongs to the man together with her calf. She is "the mother of the females that have calved."

^{1&}quot; Go-between."

² Made out of stomachs of small animals.

^{*}Gathering place of the men of the family.

Moțha dikxomo tšeo di ya bohwene di êtwa ke pudi pele. Yôna e bitšwa "kxata mošaa wu bohwene."—

(Badôkwa tšeišone ya bôna ha ba na taba le ho rataná ha batšiani. Ho ratana ha batswadi ba bana ke hôna ho fêtšaho ditaba kamoka ha tšôna.)

Moţha ba beka -hê dikxomo di ile bohwene-babô lesohana ba a ţhabiswa pholo e kxolo-kxolo, hê ba kxaţhile rratswale wa bôna. Ke hôna babô lesohana ba nthša kxomo ba re: "Ke leapô" ke hore: sekxopêla-mosadi-ke kxomu ya tshadi. Hape ba nthša kxomo ya pholo, yôna ba re: Ke "seţhôdô." Ke hore e nyakêla ba bohwene mabêlê.

Hê kxarebe e bekwa, e thšelêlwa mabyalwa a mantšintši. Babô ngwanenyana ba bitša meloko yabô bôna ka ho ba tsebisa ho bekwa ha ngwana wa bôna. Ke hôna ba doha ba ya ba tšeêla mabyalwa a mantšintši. Ke hôna a fêlêsêtšwa¹ ke batho ba bantši ba ba rwalaxo mabyalwa.

Ke hôna hê ba fiţhile habô lesohana ba a ţhabiswa pholo ka baka la monyanya wa bôna. Ka moraho ba a phaḍalala.

Ke hôna ngwetši e do fêtša kxwedi e sa kopane le monna. Ka moraho batswadi ba lesohana ba nyaka ngaka. E dil'o ba kopanya ka ho ba alafa ka dithare. Ke hôna mantšibuya a letšatši leo lesohana le ya mosadine. Hê a khumana kxarebe yeo e kile ya kopana le monna yo mongwê e se e kxarebe, ka busihu hê a tsoha o bitša mokxalabyê, papapê,² o mo tsibisa³ taba yeo.

Ke hôna papahê o thaba nku, Byale ba suha kobo ya yôna. Ba apesa ngwanenyana kobo ye. Ba a phula lešoba ka moraho ha kobo ye. Ba a apesa ngwetši yela. Lešoba ke ponthšô ya hore yo mongwê le yo mongwê e a bônane lešoba leo a tsebê hore kxarebe yeo e bekilwe e kile ya kopana le monna.

Hê lesohana le bile la ya kxarebene le a khumana⁴ a se eso a kopana le monna yo mongwê, e le kxarebe ruri-ruri-ka busihu o tsebisa papahê taba ye. Ke hôna papahê o ya lesakene la dikxomo, o fa kxarebeyeo kxomo ya letholahatse⁵ ke teboho ka baka la ho ithswara hahê hê e sa le kxarebe. E do ba kxomo yahê bophelone byahê.

¹ P. fêlêxêtšwa.

²P. tataxwê!

³ P. tsebiša,

P. la hwetša.

P. sethôle.

When these cattle go to the parents-in-law, a goat walks in front of them. This is called: "Tramper of the yard of the parents-in-law."—

(The Tlôkoa, as regards their marriage affairs, are not interested, whether the betrothed love each other. The mutual agreement of the parents of the children is the only thing that counts.)

When they take the bride home—after the cattle have gone to the parents-in-law, a large ox is slaughtered for members of the bridegroom's family, if they have satisfied their father-in-law. Then the bridegroom's family bring a head of cattle saying: "There is 'leap6,'" i.e. the thing which asks for the wife. It is a cow. Furthermore they bring an ox, they say: "It is 'sethôdô'" i.e. he will get corn for the parents-in-law."

When the bride is taken home, much beer is lavished. The bride's parents call their relatives to inform them that their child is to be taken home. So they leave lavishing much beer. She is accompanied by many people who carry the beer.

When they have arrived at the village of the bridegroom's family, an ox is slaughtered for them for their feast, then they part company.

The young wife will remain for a month without having intercourse with her husband. Then the parents of the young man call the medicine man. He comes to unite them by doctoring them with medicines. Then in the evening of that day the young man goes to his wife. If he finds that the girl has had intercourse with another man and is no longer a virgin, in the morning, when he gets up, he calls his father and tells him.

Then his father kills a sheep. They dress its skin. They clothe the girl with the skin. They make a hole at the back of this garment. They clothe the young wife. The hole is a sign that everybody who sees it may know that the girl was married when she had already had intercourse with a man.

If the young man goes to the girl and finds that she has not yet had intercourse with another man, and is really a virgin, he informs his father of the fact in the morning. Then his father goes to the cattle-kraal, and gives the girl a heifer, being the thanks for her self-control in remaining a virgin. This cow will belong to her for life.

Le nku o do ţhabêlwa. Fêla kobo ya yôna e ka se ke ya phulwa lešoba byaloka yola.

Dikxomo kamoka tseo lesohana le nywetšeho ka tšôna o thswanetše ho di tseba kamoka hê di tswala, hore le hê kxarebe e ka thala e le mosadi, a dê a tsebê ho di sêka ho ba bohwene byahê ka makxomathe.¹

Hê kxarebe țhadile, dikxomo di boya kamoka le manamane ao di tswetšweho bohwene bya lesohana. Ha ho sale selo se sengwê sa bôna.

Hê kxarebe e hwile, ba do nthša yo mongwê. Fêla e do nthšetšwa dikxomo le yôna.

THALOSO2 YA MAINA A BASADI

- 1. Mamoribula: Ke mosadi yo a tšewane ka mo ho beho ho tšerwe moholo wahê, byalô a hwa. O dile ho ribulla ndo ya moholo wahê.
 - 2. Mamolôko: Ke mosadi yo a tšerwene ke molôko wa habô.
- 3. Ngwako: (mosimana), Ngwakwana (ngwanenyana) Ke hê ho kile ha ba le ngwana ku mošene, o a hwa. Yo a do mo latêlane e do ba "Ngwako" hoba "Ngwakwana."
 - 4. Nakedi: Ke yêna ngwana a e thehe ka hayê, ba mo thea leina le.
- 5. Mamaropene: Hê mosadı a tšewa ka mo ho se naho batho, haholo hê batho ba ile ba hwa ka bohadi byahê lebakene la hê a beeleditšwe.
 - 6. Mokxadi: Ke yo a theilwene ka moraho ha moholo wahê.
- 7. Mantôtôle: Ke hê mosadi a tšerwe ke batho ba šele. Ba mo thea leina bare: Ke Mantôtôle, ke hore o thšwanetše ho lôtôla³ ba bohadi byahê.

¹ P. ka tiišetš6.

²Original explanation of a Tlôkwa.

³P, not used, derived from lôta=P. lôta.

A sheep is also killed. But no hole will be made in its skin as in the case of the other one.

The young man must know when the cattle with which he has married his wife, bring forth young ones, so that he may be able to lay claim to them with assurance, if the girl who having become his wife, subsequently sues for a divorce.

When a girl has left her husband, all the cattle together with those calves which have been born when belonging to the parents-in-law of the young man, return. Nothing of that which belonged to the young man's family remains.

If a young wife dies, they give another one. Cattle are also given for her.

EXPLANATION OF NAMES OF WOMEN

- 1. Mamoribula. This is a wife who has been married there where her elder sister who had died had been married. She came to uncover² the home of her elder sister.
- 2. Mamaloko. This is a wife who has been married by a man of her own sib.
- 3. Ngwako (a boy) Ngwakwana (a girl). This (name is chosen) when there was a child in a family who died. He who follows³ him (her) is called Ngwako or Ngwakwana.
- 4. Nakedi. This is (the name of) a child who is the only one in a house; they give him this name.
- 5. Mamaropene. When a wife has been married where there are no people, especially when people in the family of her parents-in-law died, whilst she was betrothed.
 - 6. Mokxadi. This is she who was born after her elder sister.
- 7. Mantôtôle. (This (name is given) when a wife has been married by other⁴ people. They give her the name saying: she is Mantôtôle, e.e. she must take care for her parents-in-law.⁵

¹ Her family.

² The dead wife is covered with earth when she is buried. Her sister uncovers her, i.e. she brings new life to her house.

³ I.e. is borne after him (her).

⁴ Not belonging to the relationship.

As she has no one in the family of her parents in law who protects her.

- 8. Maselokéla: Mosadi yeo a tšewane ka mo a loketšene ka hôna. Batho ba ke melôkô ya halé¹ ye e beho e arohane.
- 9. Matsehale: Ke mosadi yo a tšewane ka mo batho ba ba kileho ba tšelana hale; byale o tsosa molôkô wo.
- 10. Sewêla: Ke ngwana wa ngwanenyana yo a tswetšene le basimana.

 O wetše hare ha basimana.

DINKANO TŠA BADOKWA

1. Tšilana

Ho be ho na le batho ba bangwê ba ahile motse wa bôna wa botsebotse. Le meša ya bôna e ahilwe ka mebotwana e mebotse-botse.

Byale ba a rata ho khuduha. Hê ba khuduha byalê ngwanenyana yo mongwê yo leina lahê ba reho Tšilana a hanelêla motsene. A re: "nkase ke ka dohêla mebotwane e mebotse-botse ya meša weso."

Ke hôna a sala fawe motsene o motala. Mmahê o be a da a mo disêtša didy6² letšatši le lengwê le le lengwê.

Fêla nahene yewe e be e no³ batho ba ho dya⁴ batho. Maina a bôna bare ke bô -Ratšimo. Byale hê bô-Ratšimo ba dwile hore ngwanenyana Tšilana o setše motsene o motala ba thakxalêla yeo haholo-holo.

Byale ba da ba a lalêla hê bômma a Tšilana ba mo disêtša didyô hore na ba mmitša byane, ka mokxwa o fe naa?

Ke hôna bômma-a-Tšilana hê ba mmitša ba be ba re: "Tšilana tsela! Tšilana tsela! ndo⁵ o tšeê boswa.⁶ Ngwana mosala matopene, o do dibôna."

Ke hôna bo-Ratšimo hê ba dwile taba yewê, le bôna ba da pele ha bômma-a-Tšilana. Ba re: "Tšilana tsela! ndo, o tšeê boswa!" Ka hobane kxôro ya motse e be e tswalêlwa, fao motho a ka se keho a tsêna hê e se hore a bulêlwe ke Tšilana.

Byale bô-Ratšimo ba na le mantswe a maholo ao a sa thswanene le bômma-a-Tšilana. Ke hôna Tšilana a sitwa ho ba bulêla ka hobane o mo dwile hore ke bô-Ratšimo, e se bômmahê.

¹ P. kxale.

The pronunciation is different from P-; the sound d denotes also the explosive.

³ P. xo be xo na le.

⁴ P. ba ba dyaxo.

P. not known.

P. boxôbe.

- 8. Maselokêla. This wife has been married in the proper way. These people are relatives from olden times who had separated.
- 9. Matsehale. This is a wife who had been married where people had intermarried in olden times, now she raises a new generation.
- 10. Sewêla. This is a girl who is born among boys. They say: she is Sewêla, i.e. she fell amidst boys.

TALES OF THE TLOKOA

1. Tšilana

There were certain people who had built a very beautiful village. Also their homesteads were built with very nice walls.

Now they wanted to move. When they moved, a certain girl, called Tšilana, refused to leave the village. She said: "I cannot leave the wonderful walls of our home."

So she remained there in the old village. Her mother came and brought her food every day.

But in that country there lived cannibals. They were called b6-Ratšimo¹. When b6-Ratšimo heard that the girl Tšilana had remained in the old village, he was very glad.

Now he came and watched, when Tšilana's mother brought the food for her, how she called her.

But Tšilana's mother when she called her, said: "Tšilana-tsela! Tšilana-tsela! come and fetch the porridge! Child, remainer in the ruins! You will see it!"

When bô-Ratšimo had heard this he came before Tšilana's mother. He said: "Tšilana tsela! Tšilana tsela! come and fetch your porridge!" For the door of the village was closed so that no one could enter unless Tšilana opened it.

Now bô-Ratšimo had a loud voice which was not like that of Tšilana's mother. Therefore Tšilana refused to open for she heard that it was bô-Ratšimo and not her mother.

¹ Used for one or more.

Bô-Ratšimo ba palêlwa byale lebaka leleêle. Ba sa tsebe hore ba ka diya byane hore ba dê ba kxônê ho thswara Tšilana. Ka moraho bô-Ratšimo ba lemoha maanô. Ba a tšea letšêpe,¹ ba le fisa, la ba le le khwibidu-khwibidu. Ke hôna bô-Ratšimo ba metša thsipi yeo e besitšwene mollone. Ke hôna lentswe la Ratšimo la ba le le thsekxêne² a kxôna ho bitša Tšilana ka lentswe le le thswanene le la bômmahê.

Ke hôna Ratšimo a y'o bitša Tšilana ka lentswe le le thsekxêne, a re: "Tšilana tsela! Tšilana tsela! ndo, o tseê boswa!" Ka hôna Tšilana a kwa a kitima a bulêla Ratšimo, a re ke bômmahê. Ke hôna Ratšimo a thswara Tšilana a mmolaya, a êta a thoba merithšana a latha tselene.

Byale ka busihu hê bômma-a-Tšilana ba da ba a bitša ka ka meţhene ba se dwe lentswe. Ba a bitša hape-hape; ba re: "Tšilana tsela! Tšilana tsela! ndo O tseê boswa." Ya ba ka lefêla. Tšilana a se arabe. Ba tiisa ho bitša ba re: "Tšilana tsela! ndo, O tseê boswa! ngwana mosala matopene O do di bôna."

Ke hôna ka moraho a bôna merithšana ya Tšilana fa Ratšimo a bene a êta a thoba a latha mo fase. Ke hôna bômma-a-Tšilana ba lla ba re: "Merithšana ya ngwanaka Tšilana se ye!" Ke hôna ba lla ka bothokothoko. E be e le ka lefêla, ka hobane Tšilana o ile.

2. " Moya bohwê o ya le thapô la lebilô!"

Ho be ho na le motho yo moholo ya tumisêhaho lefasene le lengwê. A na le morwahê. Byale a nyakêla morwahê mosadi nahene ya kxole. Ke hôna ba kua bohwene ba re : " Re nyaka ho bôna mokxonyana wa rena."

Ke hôna monna yola yo moholo a re ho morwahê yo a beho thehe :5 "Sepela, O yê bohwene byaho. Ke hôna O se ke wa dya diênywa tša seţhare sa Mmilô mo tselene."

Ke hôna a sepela. Mo tselene yo a sepelane ka yôna ho be ho na le dishare tše di detšeho diênywa tša Mmilô. Ke hôna a feta sa pele le sa bobedi. Fêla a sitwa ho kxodelêla ho isa pele. Ke hôna a fapoha tsela. A y'o fula diênywa tša sethare sa Mmilô a re: "Bôpapa ha ba mpone."

¹ P. not known.

³ P. sesenyane.

³ P. merišana.

⁴P. a se ke a araba.

P. yo a lexo noši,

Bô-Ratšimo then tried in vain for a long time. He did not know what to do to seize Tšilana. Finally bô-Ratšimo devised a stratagem. He took iron-stone, burnt it so that it became very red. Then bô-Ratšimo swallowed this iron which had been burnt in the fire. Then the voice of bô-Ratšimo became soft. He was able to call Tšilana with a voice which was like that of her mother.

Then Ratšimo called Tšilana with a soft voice. He said: "Tšilana tsela! Tšilana tsela! come and fetch your porridge!" Then Tšilana came out (of the house) and hurried to open the door for Ratšimo thinking that it was her mother. Then Ratšimo seized Tšilana killed her and went off plucking out her hairs and throwing them on the road.

Now in the morning, when Tšilana's mother came, she called as usual, but heard no voice. She called out again and again. She said: "Tšilana tsela! come and fetch your posrridge!" It was in vain, Tšilana did not answer. She went on calling and said: "Tšilana tsela! come and fetch your porridge! Child remainer in the ruins! you will see it!"

After a while she saw the hairs of Tšilana there where Ratšimo had walked, plucked them out and thrown them away. Then Tšilana's mother cried saying: "These are the hairs of my child Tšilana!" She cried in pain. It was in vain, for Tšilana had gone.

2. "He who goes to his parents-in-law, goes with the pip of the lebilo!"1

There lived in a certain country a highly honoured man. He had one son. And he looked for a wife for his son in a distant country. Then the future parents-in-law said: "We want to see our future son-in-law."

Therefore that honoured man told his only son: "Pay a visit to your future parents-in-law. But you must not eat the fruits of the medlar-tree on the road."

So he left. On the road on which he walked there were trees full of medlars. He passed the first and second one. But he was unable to persevere in going on. So he left the road. He went to pluck the fruits of the medlar-tree saying: "Father does not see me."

¹ Mediar-tree.

Ke hôna hê a lle diênywa tša seţhare seo sa Mmilô a thswarwa ke ho ya ndê ho ithusa kxakala ha tsela. Byale hê a bwetše, tselene a dwa ka moraho hahê lentswe le le nkaho ke la motho, le re: "Masilu-Masilu! ka hobane leina la lesohana leo e be e le Masilu!-Masilu! Masilu! Mo-ya -bohwê o ya le thapô ya lebilô." Ke hôna Masilu a dabêha. Fêla ka bohale Masilu a topa thapô yeo ya lebilô, a e laţha.

A kwêla pele a sepela. Hê a dutše a dwa hape lentswe lela la re ka moraho haê: "Masilu! Masilu! Moya-bohwê o ya le thapô ya lebilô." A topa hape thapô yeo ya lebilô a e tšea a e sila ka lefhika¹ a laţha lerole kua kxakala ha tsela, a kwêla pele ho sepela.

A buêlêla a dwa hapê lentswe ka moraho hahê le re : "Masilu! Moya-bohwê o ya le thapô ya lebilô." A tšea thapô yeo ya lebilô a e laţhêla bodibene bya meetse a ho subelêtša. A sepela a kwêla pele mo leêtone lahê.

Fêla a buêlêla a dwa lentswe le re: "Masilu! Masilu! Moya-bohwê o ya le thapô ya lebilô." Mowe o be a setše a batametše motse o a yaho hôna. Ke hôna a topa hapê thapô yeo ya lebilô, a hôtša mollo a e fisa. A sila thapô yela ya lebilô, ya ba mosidi. A o laţha kxole le tsela.

A sepela a tšena motsene wa bohwene. A thakxalêlwa kudu-kudu. A tšena kua ndone ka kxodišô e kxolo-kxolo. Ka moraho thapô yeo ya lebilô ya dula lematine la ndo ya Masilu mo e thunthšitšwene ho lôna. Hontono² lentswe la re: "Masilu! Masilu! Moya-bohwê o ya le thapô ya lebilô."

Ke hôna ba bohwene bya Masilu ba thšoha ba re: "Mallo! Babô Masilu ke baloi!" Ke hôna ba rathêla³ Masilu, ba thala Masilu ka hobane babô Masilu ke baloi.

Hê Masilu a bwêla hayê ho papahê a re : "Ke ţhadilwe!" Mokxala byê a re : "O ţhadilwe ka tsela e fe?" Masilu a re : "Ba nţhadile fêla. Mokxalabyê a fetola a re : "Afa ha O a dya seţhare sa Mmilô mo tselene?" Ke hôna Masilu a fomola. Mokxalabyê a re : "O diyile byalô ka baka la ene? Ke ho laetše hore O se ke wa dya diênwa tša seţhare sa Mmilô mo tselene."

¹ P. lefsika.

² P. xomme.

³ P. raka.

⁴ P. homola.

But when he had eaten the fruits of the medlar-tree, he was compelled to go aside and to relieve himself within a short distance from the road. Now when he returned to the road, he heard behind him a voice similar to that of a person saying: "Masilu! Masilu!" (the name of the young man was Masilu) "Masilu! Masilu! he who goes to his parents-in-law goes with the pip of the lebilo!" Then Masilu was astonished. And angrily he picked the medlar-pip up and threw it away.

He went on. When he rested he heard again that voice saying behind him: "Masilu! Masilu! he who goes to his parents-in-law goes with the pip of the *lebiló*!" He picked the medlar-pip up again, seized it, ground it on a stone and scattered the powder on the road and went on.

But he heard again the voice behind him saying: Masilu! Masilu! he who goes to his parents-in-law goes with the pip of the *lebilo*!" He seized the medlar-pip, threw it into a well and let it sink. He went on on his journey.

But he heard again the voice saying: "Masilu! Masilu! he who goes to his parents-in-law goes with the pip of the *lebilo*!" Now he was already near the village to which he wanted to go. So he picked up the medlar-pip, made a fire and burnt it. He ground the pip until it was ashes. He threw it far from the road.

He went and entered the village of his future parents-in-law. They were very glad to see him. He entered a hut and was highly honoured there. Then the medlar-pip stuck to the door of Masilu's hut at which it had been thrown, and the voice said: "Masilu! Masilu! he who goes to his parents-in-law goes with the pip of the lebilo!"

Then Masilu's parents-in-law became frightened. They said: "Mallo! Masilu's people are sorcerers!" So they drove Masilu away, they broke off the engagement for the reason that Masilu's relatives were sorcerers.

When Masilu returned home to his father, he said: "My engagement is broken off!" The old man said: "How has your engagement been broken off?" Masilu answered: "They just broke off the engagement." The old man answered: "Have you perhaps eaten the fruit of the medlar-tree on the road?" Then Masilu kept silent. The old man said: "Why did you do that? I ordered you not to eat the fruits of the medlar-tree on the road."

¹ Exclamation to show astonishment.

Masilu a thôka phetolô. Ke hôna bohwê bya Masilu bya a seyala ka baka la ho se dwe hahê. E fêla mo.

3. Ngwaha wa dala ya Mothopi

Ho be ho e noo mosadi yo mongwê yo a bene a tima monna tša ho dya, hê a e seye kxôrone. O be a apea ka pele a thsolêla bana, ba dyê ba timê mokxalabyê. Hê a da ka hayê a khumana hore ba feditše ho dya.

Yo mongwê wa barwa bahê a bôna hore taba ye ya ho tima mokxalabyê tša ho dya ke empe. Ke hôna a luha maanô; a dwana le papahê hore o do mmilêtša didyô ka tsela ye : "Ke do re hola pitša a kxabakxaba, ka re : Hê O kxabakxaba, O pula na? Hê e thšuma, ka re : Hê O re "huhu," O thsukudu na? Hê e thsolwa ka re : "Hê O retoloha mabyene, O pela na?" O namê O dê O tsebê hore ke lebaka la ho dya."

Ke hôna mokxalabyê a diya byalô ka hê morwa wahê a mo laetše, a khôna a khumana tša ho dya.

Dala e ile ho feta. Ha belêhwa ngwana ka mošene wo. Mokxalabyê a kuka ngwana yo, a mminthša a re : "Mmamaraka a hudune a thadola a khurumêla ka lesêlô."

Ho a isa lebakanyana mosadi le yêna a tšea ngwana yo a mmintša a re: "Pataka-pataka! kxaka ya tswala kxôrone." Ke hôna ba thalosêtšana. Mosadi a re: "Re be re e dya maraka, re ho tima." Monna a re: "Ke be ke e dya dikxaka, ke ho tima."

Ngwana yola wa ho pholosa papahê e ile ya ba yêna kxosi, le hê e be e se yo moholo ka mošene wabô.

¹ P. senyena,

P. solela.

P, mela.

⁴ P. napa.

Masilu was unable to answer. Thus the engagement of Masilu was broken off owing to his disobedience. This is the end.

3. The hunger-year of Mothopi

There lived a certain home wife who did not supply her husband with food while he sat at the council-place. She cooked quickly and divided (the food) among the children that they might eat and leave nothing for the father. When he returned home, he found that they had finished eating.

One of his sons thought that this plan to exclude the father from the meals was bad. Therefore he devised a stratagem; he agreed with his father that he would call him for the meals in the following way: When the water is boiling I shall say: "When it patters, is that rain?" When the food is ready I shall say: 'If you say: Hu Hu! are you a rhinoceros?' When (the food) is dished out, I shall say: 'When you turn away from the stones are you a rock-rabbit?' In this way you will know that it is time to eat."

Thus the father did as he was advised by his son and got his food.

The time of famine passed. A child was born in the village. The Father carried the child, he rocked it and said: "The pumpkins are in the stamping-block, she took the pot from the fire, she covered it, she covered it with the flour-sieve."

After a while the wife also seized the child and rocked it and said:

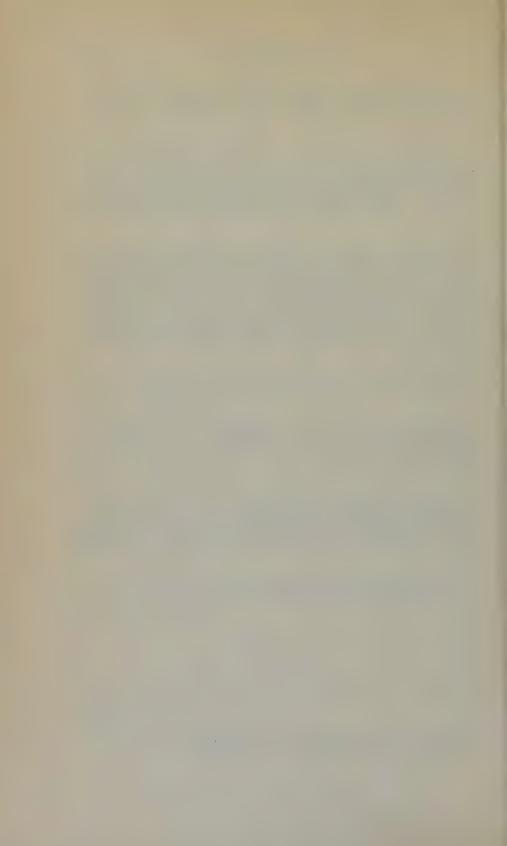
1Patakapataka! the guinea-fowl had young ones on the council-place."

Then they understood each other. The wife said: "We ate pumpkins, we excluded you."

The man said: "I ate guinea-fowls, I excluded you."

The child who saved his father became the head although he was not the eldest son in the family.

¹ Expression to imitate the noise of the housewife clapping her hands.



MORTUARY CUSTOMS AND THE BELIEF IN SURVIVAL AFTER DEATH AMONG THE SOUTH-EASTERN BANTU¹

By MAX GLUCKMANN

The belief in survival after death is not a response of the individual to death. It is accepted as part of his social heritage and must therefore be related to mortuary and other social customs. Social anthropologists who explain it entirely by the emotional comfort it gives to the dying person and his survivors² avoid many of the important problems involved. Typical statements such as that by believing in his immortality man "never has to come to an impasse and his hope will hurdle death itself," or that in the "conflict and chaos" of death religion "standardises the comforting, the saving belief,"4 are very facile explanations. Unloved parents are buried with full ceremony; strangers have special funerals; people dying away from home may be buried by proxy. The emotions expressed at a funeral may have no relation to the emotions actually felt. Thus Miss Hunter tells us of the Moondo that "women are not expected to make a fuss and weep after a child is buried , but the fact that they are composed does not mean that they do not feel the loss bitterly."5 Mortuary customs impose on the survivors not only certain modes of behaviour but also the simulation of certain emotions which may or may not be felt. Thus the statements of Wallis and Malinowski may describe the emotional satisfaction derived on occasion from a funeral but they do not advance a sociological understanding of all mortuary customs and beliefs. I propose in the following analysis to indicate what seem to me some of the major problems, chiefly by reference to Junod's account of the Thonga of Portuguese East Africa.

¹ This article summarises a section of a thesis (*The Realm of the Supernatural among the South-Eastern Bantu*) accepted for the degree of Doctor of Philosophy in the University of Oxford, June 1936.

²e.g. Wallis, pp. 46-7; Malinowski, (a) & (b). Full bibliographical references are given at the end of the article.

^{*} Wallis. loc. cit.

Malinowski, (a) pp. 46-51, (b) pp. 67-9.

⁵ Hunter, p. 24.

I

According to the South-Eastern Bantu it is either a man's shadow or breath which becomes his ghost after his death. This ghost figures in the ritual beliefs and practices of these Bantu. Two other things are also made the subject of ritual. Firstly there is his body which must be disposed of in some way. Secondly there is what Radcliffe-Brown calls his social personality, "the sum of characteristics by which he has an effect upon the social life and therefore on the social sentiments of others. A person occupies a definite position in society, has a certain share in the social life, and is one of the supports of the network of social relations." He goes on to say that "death constitutes a partial destruction of the social cohesion, the normal social life is disorganised, the social equilibrium is disturbed. After the death the society has to organise itself anew and reach a new condition of equilibrium." I do not like the manner in which Radcliffe-Brown has described this readjustment of social relationships, but he makes clear that the mortuary customs as modes of social behaviour are concerned not with the dead man's own individual personality or his personal relations with his survivors. They deal with his social personality, the ideal position which he occupied in the society. The relation of these two personalities is another problem.

I shall later expand on this point. Now I wish to point out that Radcliffe-Brown also loses himself in the emotional interpretation when he says that "we may translate the above statement into terms of personal feeling by saying that the death removes a person who was the object of feelings of affection and attachment on the part of the others and is thus a direct offence against those sentiments in the survivors."

"Though the dead man has ceased to exist as a member of society, it is clear that he has by no means ceased to influence the society. On the contrary, he becomes the source of intense painful emotions." I stress this point again because this type of explanation is frequent to-day. Ritual and mystical beliefs determine the emotional reaction of a particular people to a certain situation and therefore one cannot explain the reaction by the emotion expressed. Radcliffe-Brown's last quoted statement will not cover the rejoicing of the Thonga if a man is killed by lightning or the orgies of mourning which Shaka forced on his subjects after his mother's death.

Radcliffe-Brown has described the survival of the social personality; he has not properly elaborated his thesis. When a man dies his death

¹⁽a) pp 285 et circa.

² loc. cit.

breaks off a number of social relationships. During his life he was related to a large number of people in different ways and these relationships were determined by certain social rules and expressed in certain modes of behaviour. After his death these relationships are changed and new ones come into being; perhaps also the relationships between his surviving fellows are affected. These vary from one person to another. For different individuals a man to whom was owing a certain social attitude has become a ghost. One person may be the dead man's son. another is a maternal uncle, or a brother, or wife. To the death therefore each of these individuals is required to react differently. It must be remembered that a funeral as recorded by the ethnographer is an abstraction from different people's behaviour. He describes the funerals of headmen, women, children, witch-doctors, etc., always in relation to the dead person. But for purposes of sociological interpretation a further description is required. For in Native life a funeral differs for each kinsman.

In communities such as those of the South-Eastern Bantu² where status is determined by consanguineous and affinal relationships every man and woman has his or her rôle in social life fixed by these relationships. On the death of, say, the head of a homestead, the relationships of his cognates and affines are altered. In addition the relationships of his relatives towards each other are affected and are reconstituted in the mortuary customs. For the widows this death means the loss of their husband and they must prepare to start a new life with one of his kinsmen: a brother or son may be succeeding to the headship of the homestead and the other male relatives becoming subordinate to him; his children lose their father, relatives of the widows their link with their affines, his uterine nephews perhaps their special connection with their mothers' kin. A different social situation exists for each of them. The ritual of death ceremonies provides them with a social reaction to this situation adapted to their special relationship to the dead man. Outside of their own ritual behaviour they may see the funeral as a whole: but in the readiustment of social relationships each participant has to observe his own prescribed rules of behaviour. At one funeral these will vary from relative to relative, for one individual they will vary from the funeral of one relative to another.

For a full understanding of mortuary customs we require detailed information on these prescribed rules of behaviour. Unfortunately it is

Vide e.g. Cook, Junod, Wedgwood. Miss Hunter is better, but has not fully appreciated this point.
 For the cultural background of the South-Eastern Bantu vide Schapera (a).

not available. Thus Junod describes the part of various relatives in a long series of rites. He does not trace the connection in their behaviour through the whole series. Of course their behaviour is related to that of others at the same time but it is equally related to their own behaviour in preceding and succeeding ritual situations.

I must make one further point. When a man dies his relationships with his fellows are affected by mystical beliefs about the cause of his death; by the actual manner of his death; and by beliefs about death itself. All these elements combine in the complicated death ceremonies. I propose to consider these as they affect the readjustment and reconstitution of social relationships; the disposal of the body; reaction to the mystical causes and forces of death; the life of the ghost in the afterworld and the links of the afterworld with this world.

Π

On the death of a family headman various kinship relationships are involved. There are his cognatic relationships with brothers and sons, especially as the death of a family head is often followed by the splitting up of the family which he has held together. Then there are his matrilineal relationships, and his relationships with his wives and their kinsmen. Finally one may consider on this plane his relationship with his dead ascendants, the ancestral spirits of whom he is to become one. In death ceremonies the old relationships are expressed and new ones formally initiated and the ritual demands the expression of determined emotions and behaviour much of which is related to these changes in social relationships.

It is by no means certain that one could in the field work out coherently the ritual behaviour of each set of kinspeople. Many other ideas are represented in funeral ceremonies. The task is therefore still more difficult on the data available, but I shall set out suggestions which indicate that some such study might profitably be made.

To begin with one notices in all the South-Eastern Bantu tribes that all relatives must be informed of the death and if possible pay their respects to the dead. Those far away are informed by magic. The Thonga, for example, blow medicines in the direction of the absent person; Mrs. Kuper informs me that Swazi in Johannesburg use purifying medicines if they hear of the death of a relative at home, and that a Zulu in Johannesburg told her that he lost his job because he had not been informed of the death of his child and had not therefore had a chance to purify himself. The food of the homestead is taboo to relatives. They shave their heads

and undergo strengthening medications. The essence of the funeral is that it brings together all the kin. I have noted that there is a tendency for families to split on the death of patriarchs. At their funerals this is shown in a ceremonial venting of grievances by all the relatives. The rites themselves stress the family unity, largely in sacrifices which affirm the bonds of the survivors, the dead and their common ancestors, and in which the new head of the family first officiates as priest. The Thonga pray that they may live in peace; perhaps they wish that the surviving brothers may not quarrel. The death of the headman upsets the collective life of the homestead which is broken down and abandoned. The Thonga think this collective life is represented by marital sexual relations, and these are suspended for a time, then resumed in ritual intercourse. The purpose of this is stated to be "to cleanse the inheritance" which is primarily succession to the headship of the homestead.

Through all the rites runs the expression of group unity. A funeral is the ceremony par excellence which all relatives must attend, lest they be suspected of causing the death by witchcraft. It is too the only ceremony when, if individuals are unavoidably absent, they are brought by proxy into the rites. Their belongings are purified for them and when they do return home they must first ritually eat of food before they can enter the homestead. When Thonga huntsmen return to their homes after a long trip to find that someone has died they and their guns are purified. the rites of allegiance to the ancestors quarrels must be settled. On this occasion the group often reacts violently against the suspected cause of death (perhaps a wizard); in some Bantu tribes the men brandish their weapons against the spirits. Among the Zulu there is a ritual hunt which on the death of a chief may be turned into a war. In other words the unity of the kinship group or the tribe is additionally expressed in opposition to some enemy outside of it: a wizard (who does not probably in fact exist), the evil spirits, or a hostile tribe.

Of the behaviour of brothers and sons we are told so little that all one can infer is that the brothers who supported the dead man when he was alive have to give him their last offices as gravediggers, and, where necessary, support the chief son, the heir, in his ritual observances. Part of the ceremonial is directly to institute the heir and exhort him to behave well. The brothers are magically cleansed and purified for, since death is infectious, they are likely to follow the dead. Even their spears are contaminated; they are cleansed with medicines and, among the Zulu, formally used again in a ritual hunt.

Of the behaviour of affines we are only told by Junod that parentsin-law mourn over their daughters, the new widows, but the first prayer

at the grave requests that they will assist in the mourning. The ceremonies in which Thonga matrilineal relatives figure are significant. They have no official part in the burial or the great mourning ceremony; only at the end of the latter does one of the uterine nephews appear to cleanse the food of the deceased. That is, though the patrilineal kin cannot touch the food, they are formally allowed to after this nephew, a kinsman but not of the group, has cleansed it. But this rite is extraneous to the ordinary ritual: it is only in the final family rites that the uterine nephews have an important role. When the family unity is being ritually expressed these nephews sacrifice to the dead man. For some reason his first acceptance of a sacrifice is not from his cognates. And these uterine relatives desecrate the sacrifice by interrupting it and stealing the meat, which is in accord with their normal joking relationship with their maternal uncle when he was alive. Then they could snatch his food from him. Perhaps in this final family rite there is a tendency to assert the integrity of the patrilineal group against these friendly outsiders, or to give sublimated expression to any feelings of relief, hostility to the dead man, etc., the patrilineal relatives may feel. But one can add little to Junod's statement that the nephews can do this because they are "the darlings of the gods." Jaques however maintains that Junod is wrong in saying the bantunkulu are the uterine nephews; he says they are the patrilineal grandsons. Thus it would be the privileged descendants of the headman who treated them freely and lovingly who spoil the sacrifice, and perhaps they sacrifice to induce the spirit to care for the descendants he loved.

Most of Junod's information is about the ritual behaviour of the widows. Whatever their feelings they are required to lament most and mourn longest. Their actions are the centre of the great mourning ceremony, which commences with their initiation to the status of widows¹ by those previously widowed. In this initiation the left groin of the widow is cut. The blood represents the husband and if it flows freely marital relationships are considered to have been good. The widow is exposed to medicine smoke and with her urine extinguishes the fire. Now, as a widow, for the last time she passes through her husband's hut. For the next five days the widows are treated by the magician and live outside the village. Some time later there are wild and lascivious dances when the widows, "uncovered by the death of their husband," posture lewdly before the men.² The widows do not participate in the ordinary

¹ N.B. They were widows before the ceremony: the ceremony formally initiates them to the social status of widows,

² Evans-Pritchard (a).

sexual rites of cleansing, but each has to seduce a stranger into intercourse and break off the act ante seminem immissum. The man will die. The widow's intimate associations with the husband were through sex, and she has ritually to pass on the contamination of death to the stranger in intercourse. Then after a preliminary medication she can begin life with the man who inherits her.

Meanwhile the dead man is also moving into a new social status. At a Thonga burial he is introduced to the ancestors as "dead," and in the later rites he is himself sacrificed to. Among the Zulu an old man may be escorted on his way, before even he is dying, with a sacrifice; and when he dies there is little ceremonial as he has merely "gone home." For a time in Native parlance the spirit is thought to wander after burial in the veld, and then to appear in the form of a snake at a final ceremony some months later. Thereafter he has power, varying with his status on earth, to help or punish his own classificatory descendants. The ancestral spirits communicate with the living through diviners and dreams and by sending illness; they give fertility or barrenness, pestilence, rain, good crops.

I have attempted to trace through Junod's description the part played in funeral ceremonies by each set of relatives. Perhaps I may briefly indicate the relation of these parts within each Thonga rite. Before a man's death he is concerned not with the fate of his soul but with settling his affairs on earth. Immediately after his death his body is prepared for burial by his brothers while care is taken to inform all his relatives of the death. Sexual intercourse of married people is taboo. Everybody, and all the man's possessions are contaminated by the death: this notion explains much of the behaviour of readjustment. It seems to arise in the feeling that if one member of the family dies another will follow, and the closer the relationship the greater the danger. Not only are the ancestors invoked to help the family but the magician is called in to strengthen it. This seems to indicate that in Native belief death is ascribed almost always to a mystical force, which continues to operate now that it has its hold in the family and which must be ritually countered. After the death of children and old people whose death is taken as natural there are no such ceremonies. The body is buried reverently and the spirit commended to the ancestors.

In the succeeding rite the widows and grave-diggers (brothers?) are purified and strengthened by the magician; the former are initiated into the status of widows, and while the men hide they pass through the funeral hut for the last time. Then the men take the first step towards

the demolition of the hut. The dances, lewd for women, warlike for men, commence. The homestead, its inhabitants and their implements are medicinally cleaned.

Some time afterwards the married couples ritually resume sexual intercourse and impress their sexual secretions in the village square. After another interval the dead man is sacrificed to and his hut is crushed. There is a reunion which all relatives must attend and at which all grievances must be vented. The new headman is exhorted to rule well. The matrilineal relatives come to assist; they sacrifice and steal the sacrificial meat. Only the widows remain contaminated and they cleanse themselves in intercourse with a stranger.

The above analysis may be applied to the variation of death ceremonies with social status. One must note, however, that there is no mean for funeral rites and variation from it; a death creates a different social situation according to the status, or manner of death, of the deceased, and each funeral involves the participation of different persons behaving in prescribed ways.

In the burial of a Thonga child only the mother who alone has had real social relationships with it plays an important part, though the father digs the grave. Only the parents perform the sexual rites of purification: other villagers need not. If the child has been initiated its spirit is consigned to the ancestors. Old people are already so closely associated with death that they are said to "go home" and their burial rites are few. A woman's death, unless she is the chief wife of a headman, affects only her own family. Strangers and friendless people, having no social relationship with the community, are buried without ceremony. In the descriptions of chiefs' funerals one finds that little attention is paid to their relations with their families. Apparently a chief's importance as head of his tribe overrides family relationships. Great care is taken to maintain peace in the country; otherwise noteworthy are the comparative magnificence of the funeral and the attendance of large numbers of tribesmen.

Warriors killed in battle and people killed by violence are not buried in the village lest they bring death with them. Lightning especially is a dread contaminating force, and the villagers must be cleansed by a special magician. The village is abandoned. There is no mourning lest Heaven which sent the lightning be offended. Certain criminals, such as wizards, have their bodies thrust out into the bush.

But the readjustment of social relationships does not explain the whole reaction to death. Most primitive funeral rites show no patient

resignation to the death, but a determined opposition to it, expressed among the South-Eastern Bantu largely by the idea that it must be due to a mystical cause (sorcery or witchcraft). But here the strongest notion is that of the contaminating effect of the death which extends to relatives, material objects and food. Medicinal washings and protective rites, directed by a magician, and appeals to the ancestors and the dead man. are used against this contamination, as well as taboos to be observed for a period. These mourning taboos and reactions are a mode of expressing kinship relationships and are referred to as evidence in legal disputes. Some of the dead person's most personal effects are so closely related to him that they must be destroyed or buried with him. In communities where most deaths are ascribed to mystical causes the idea seems to be that now that these forces have a footing in the group steps must be taken to expel them or to protect the survivors. To the Mafulu of New Guinea the spirit is always evil and it must be driven away, and perhaps with it the cause of death. The South-Eastern Bantu hope the spirit will be beneficent (thus they appeal to it) and they have to keep it in the ancestral cult; therefore they protect themselves ritually against death, as can be seen in the custom of burying those who die by violence facing away from home, and they may in addition attack the cause of death by punishing the wizard who caused it. This last reaction is not, as among the Venda¹ and Azande,² essential: there is no mandate enjoining vengeance, and one cannot tell from the records how often it is done. Mrs. Kuper tells me that according to the Swazi the ancestral spirits may make a man very ill, but they never kill him.

III

There are, it seems to me, two aspects of survival after death: the journey of the spirit to and its continued existence in another sphere of living, and the relations of the dead with the living. Most people pay attention to both of these aspects. But it also seems that social attention when directed to the second emphatically in the form of an ancestral cult tends to exclude any emphasis on the first. If an ancestral cult may be defined as the belief in the continued interference of ancestral ghosts in the affairs of their living kin and continual ritual behaviour by the latter to the former, I think it will be found in general that people with a well developed cult of tendence on the ghosts have a very inchoate picture of the afterlife, which will depend on individual imagination rather than

¹ Stayt.

³ Evans-Pritchard, E.E. (b).

² The emphasis is on cult of the ancestors, not cult of the dead,

cultural dogma. A number of problems are suggested by this: firstly, how is it possible to measure the intensity of ritual beliefs and behaviour for purposes of comparative study. Secondly, how frequently does the dead's paramount importance as related to their descendants exclude cultural attention from the afterlife, and how does this affect mourning customs and the disposal of corpses. Thirdly, why do particular societies have an ancestral cult: why, if it is a matter of extended kinship grouping do some societies with that form of grouping not have the cult, and how is the belief in active interference by the ancestors related to the social existence of gods and other spirits.

The first problem must be settled if social anthropology is to progress in the comparative study of ritual. Thus where an ancestral cult is concerned one would require to know how often and in what situations the people thought of and approached their ancestors, and as far as possible how they evaluated the cult in relation to other modes of behaviour, i.e. what satisfaction it gives them. Then the same questions would have to be answered about magic and the belief in gods. In view of my inability to judge these cults from existing data I can do little more than suggest some lines on which enquiry may be made.

How far does the concentrating of cultural attention on the relations of dead ancestors with their living descendants exclude attention from the afterlife? In some societies neither system is at all developed, but reference to others1 shows that where one is important the other is always inchoate. The two are not found together. Thus Fijians, North American Indians, Egyptians, Romans, Greeks, have an elaborate mythology of the journey to the afterworld and what happens to the ghost there, unlike African tribes which, with their ancestral cult, have left the picturing of the afterlife to the individual—and it is a life more or less like that on earth.2 The importance of the distinction is, firstly, that it may indicate a general tendency for cultural attention to concentrate on one only of several aspects of a phenomenon, at any rate in some particular situation. The other aspects will only be consciously evoked when some special situation occurs. Secondly it may be correlated with ritual practice. Thus in certain societies where there is no ancestral cult a large part of the mourning ceremonies are concentrated on the dead person and on helping his spirit on the perilous journey to the afterworld.3 Among these societies the individual's desire to survive death might be

¹ Vide Hastings (a). pp. 411, seq passim.

² Soga.

³ Vide Hastings (b), pp. 411 seq., Wedgwood.

of importance and it must be noted that Malinowski studied a society of this type. But the ancestor-worshipping Bantu are only concerned with instituting the dead man safely as an ancestral spirit and they have no mythology of his passage from this life and no developed notion about the soul. The body is carefully disposed of and the chief importance of the grave is that the spirit will be approached at it. Thus headmen of families who become the spirits really approached are buried in the cattlekraal, the temple of the village,1 or among the Thonga in the sacred groves. The graves of chiefs remain marked as sacred places, even sanctuaries. The Zulu and Thonga chiefs' hair and nail parings are preserved in sacred tribal symbols and often some attempt is made to mummify the bodies of chiefs. Their graves are more solid and the location of their graves is sought to be preserved by groves of trees and legends, so that the people can often return miles to sacrifice there. In addition their greater social importance is thus expressed. When a village is moved ritual is performed to transport the ancestors to the new site. Generally the form of the grave² (among the South-Eastern Bantu it is supposed to represent a hut with a square outside) seems to reflect the idea that after death the individual is not greatly changed. The graves of chiefs are always sacred; other graves only in the situation of sacrifice, otherwise probably only scant attention is paid to them, or to such places as the back of the great hut of the village where the ancesters dwell. Dr. Fortes has remarked that this is so of shrines among the Gold Coast Tallensi, a conclusion borne out by Dr. Evans-Pritchard's observations in the Sudan. The grave and the existence of the spirit are unimportant except when evoked in the ancestral cult: the main purpose of the burial rites is to restore kinship relationships among the survivors and of the dead man to his ancestors and descendants.

The South-Eastern Bantu have a hierarchical society of ancestors manifesting active interest according to their status when alive in their descendants.³ Mrs. Hoernlé points out that in all the South African tribes one of the strongest bonds holding individuals together is descent from a common ancestor. Their social organisation is built up largely on the basis of kinship for members of the same lineage tend to live in the same village or at least close to one another in the same area. The closest bond naturally is between members of the same family, i.e. between

¹ The village may be moved.

² This point might be pursued with profit after making allowance for technical ability. Thus Robertson relates the difference in Greek and Egyptian architecture to religious beliefs.

³ I am not considering the beliefs that the ancestors send trouble, or help, their descendants, and punish erring members of the family.

siblings and their descendants; the links between these people are not broken as the years go by, though since kinship is patrilineal and marriage patrilocal it is inevitable that a number of brothers can more easily maintain contact with each other than with their sisters who move off in different directions as they marry. Moreover inheritance is from father to sons or from brother to brother and then to the eldest brother's sons, and therefore a closer link is established in this line. Now many peoples have a kinship organisation of this type, and some of these are linked, in their smaller groupings, by a definite association with a specific area of land and through the possession of hero-gods, totems or badges. This does not apply to any of the smaller social groupings among the South-Eastern Bantu, though the tribe is intimately bound to its land. Therefore among the South-Eastern Bantu the links between living people are maintained by keeping in mind their actual common descent. Bryant says of the Zulu that "the preservation of pedigrees with them was absolutely necessary, because without it mutual relationships, with their appropriate terms of address, would never have been known."

This is obvious and easy for the individual family and even for the group descended from a common grandfather but as the ramifications of kinship become more complicated and the group larger "it needs a distinct effort and organisation of a high type to keep the links strong. It is obvious that the common ancestor must be remembered, and it is much easier to remember if there is a definite cult of remembrance, a definite ritual which brings those together who are of common kin so that they are perpetually reminded of their bonds."2 This is done by sacrifices and commemoration, and it must be remembered that tendence on the ancestors is compulsory. A man may or may not believe in magic, but if the ancestors send him illness he must sacrifice, and there are certain periodic obligations to them which must be fulfilled, at birth, initiation, wedding, and death ceremonies. For a breach of custom they can punish and here their power is the same as that of Bantu elders to curse erring relatives.3 Since, moreover, it is only these elders who have the right to sacrifice, their social position is strongly entrenched. A junior who has quarrelled with his senior must in the end, when he is in trouble, make amends. All the family should attend, and Blohm remarks that among the Xhosa even Christian converts had perforce to attend sacrifices lest they be expelled from their families.4

¹ Bryant (a)

² Hoernlé (a). Dr. Fortes tells me that the Tallensi of the Gold Coast quite often give this sort of reason for their ancestral cult.

³ Vide Schapera (b)

⁴ Blohm.

Once the people linked by a common ancestor separate; they forget that ancestor as they lose their ties of communal life, and if they forget that ancestor they tend to drift apart¹ and perhaps to sacrifice to and approach a new founder. "A group therefore will be larger and stronger the longer the line of ancestors it can count, the further it can grope back into the past for its beginnings. Since the people are linked together through their ancestors the dead must not be lost to society. They represent the past life of the group, links binding together the living. The cult of the ancestors then gives life to the kindred which it would not otherwise possess." This may be seen in the manner in which the ancestors and their great deeds are praised at marriages, births, feasts, and funerals. For the dead are held on to and are thought merely to be initiated into another part of society, the spiritual and unseen but potent part of it, and the people are perpetually concerned with maintaining contact with this unseen world.

Mrs. Hoernlé thus suggests possible answers to some of the questions I have posed. She points out that the ancestral cult is associated with a system of extended kinship where the kin are organised into a strong social group which tends to split up as it increases. The ancestral cult is a mechanism by which kinship bonds are affirmed (among the Thonga matrilineal as well as patrilineal bonds) and the hierarchy of society expressed. In this the ancestral cult is, like much ritual, a form of mnemonic, legally prescribed actions which vividly express social relationships.

I have spoken above of the patrilineal lineage among the South-Eastern Bantu as a strong social group. My recent researches in Zululand indicate that the Natives themselves do not think of this group, or of a clan, but think in terms of people with the same isibongo (clan-name). That is, we abstract the group. Mrs. Kuper confirms this of the Swazi. The Zulu have no word to describe a clan, as they have for political areas. But the Xhosa and Mpondo have such a word. However, my point here is that the ancestral cult is a mnemonic of kinship relationships, and since among the Thonga the matrilineal kin are important one finds among them that matrilineal ancestors are important.

In many societies there is a cult of the dead which is not a cult of the ancestors, since no tendence is paid to a line of ascendants. In others the spirits of the dead, especially of rulers, are important, but rot the

¹ The former would in my opinion be the usual course. Quarrels or mere increase in size would lead to the hiving off of lineages.

spirits of dead kinsmen as such. In modern spiritualism we are afforded a chance to examine the growth of a ghostcult and see whether it is affected by social groupings. As far as I can judge from spiritualist conversations1 these deal mainly with the fate of those at the seance (the living of course) or the contact of the spirits with the earth, and very little, despite the theory of seven dimensions, with the life of the spirits themselves. And then, it seems to me, it is only by forcing a polite interest that people ask questions about that life, to get the same answer as the Bantu tribesman gives—a world better than, but more or less like, our own. Here however dogma is not yet clearly formulated. The springs of genuine spiritualism are mainly the desire to get into touch with dead relatives, but one cannot do so directly. One must do it through one's own, and the medium's, spirit guides. Of them we each have two or three. At the seances I attended there were two mediums: the first, a Christian woman, was "guided" by three spirits, those of an American missionary, a Hindu, and a Turkish girl who died at the age of two; the second medium, a naturalised South African Jew, had as his guides an American Negro vaudeville singer and a Lithuanian cantor—of a New York synagogue. The guides mentioned by Bradley are equally exotic. The "mediums" of the Thonga and other primitive tribes are also "possessed" by foreign spirits; but the ordinary tribesmen (and Zulu mediums) receive guidance from their dead kin. In spiritualism we are all accompanied by foreigners who will call up our relatives, i.e. where the important social kinship group is the family, the attendant spirits are not kinsmen: and similarly in the Andamans² a man sees not his own dead ancestors, but just ghosts in the forest. It may be that in the growth of spiritualism one can see how social morphology may determine dogma, in that people are guided by stranger-ghosts, unlike the Bantu tribesmen whose kindred-ghosts advise them with dreams and omens, though their wishes may have to be interpreted by a skilled "medium" who acts with certain techniques and occasionally with stranger-ghosts. In an appendix on the ancestor cult Junod makes a similar point in comparing the Thonga and Ila with the Akamba, among whom the largest kinship unit is the family, and the power of the ancestors is "reduced to a minimum; though they are very much feared they are thought to be mortal."8

Vide e.g. Denis Bradley. I attended seances myself in Johannesburg in 1932.
 Radcliffe-Brown, op. cit. passim. The Andamanese live in local groups each of which consists of a number of families.

^{*} Op cit., Vol. 2 pp. 693 seq.

Mrs. Hoernlé suggests another line of enquiry when she says that many peoples who have a kinship organisation similar in type to that of the South-Eastern Bantu, but no ancestral cult, maintain their association by reference to a specific area of land, or by possession of hero-gods, totems or badges. The point is that in all these cases ritual is a means of expressing the structure of the group; and a tendency to do this runs through all South-Eastern Bantu ritual. It may be noted that the South-Eastern Bantu lineage relates to a specific area of land only in so far as its ancestors are buried there1 and when migrating it takes ritual steps to carry its ancestors with it.2 In many communities the kinship group seems to maintain itself by owning a particular area of land. Thus for example there are Scottish clan demesnes (and names), the Iroquois long houses³, Algonkian hunting areas,⁴ and Hottentot waterholes.⁵ Radcliffe-Brown has stressed that one of the main features of totemism is its relation to this type of social grouping,6 generally with no ancestral cult. The several kinds of ritual mechanism for maintaining cohesion exist side by side in some communities; but one or other tends to be dominant.

But once this rough correlation is established it is not yet clear why any society should have one ritual rather than the other. An explanation of this can probably be offered only in historical terms. However, if other culture traits which accompany each of these rituals be investigated, it seems that the clan association with land is found with one of two sets of environmental factors. Firstly it is found as among the Hottentots where land is plentiful but water limited, and ownership of waterholes is important; and this is also what constitutes the clan bond in Australian tribes where totemism is associated with local totemic spots and reincarnation, rather than with descent groups. Secondly Scottish clans and old English families are associated with land in a country where it is all taken up. The real totemic cult (an active ritual, not mere prohibitions) is found in hunting communities and it may be noted that hunters such as the Andamanese, Bushmen and Algonkian who have no such cult, have no clan grouping. With all these societies one may contrast the South-Eastern Bantu, pastoral-agriculturalists with spacious land and organised in lineages.

¹ Vide Bryant, A. T. (b)

² Callaway. Wangemann

³ Goldenweiser, A. Chapter on the Iroquois.

⁴ Speck.

⁵ Schapera, I (c). Information from Mrs. Hoernlé.

Radcliffe-Brown (b) pp. 124 seq.

I have now to consider the relation of the ancestral cult to other ritual practices. As far as South-Eastern Bantu magic is concerned it is related in that the two practices are used together, and in many instances the power of medicines is increased by the ancestors, from whom knowledge of the medicines was probably obtained. This is particularly noticeable of socially important magic. Other magic may be bought, sold and taught outside the kinship group, but in general in their magic the substance used is of greatest importance: the spell is included in a prayer to the ancestors which gives the magic its social charter and which guarantees the right and power of the magician to use it.

There are other spirits and spiritual beings besides ancestral ghosts. Among the South-Eastern Bantu they are of two kinds, what one may call for want of better terms "demons" and "gods." The demons are evil spirits: souls not properly buried (a sanction enforcing observance of mortuary customs); the spirits of living and dead which have fallen prey to wizards; and certain sprites which exist in their own right but may be used by wizards. These demons are held responsible for ill which is not attributed directly to wizards, or to the vengeance of the ancestors among whom female spirits are capriciously evil. In other words these evil spirits and sprites are used to explain certain misfortunes. What misfortunes I cannot on the data available detail, though they are sometimes suspected of causing certain illnesses. But here in the South-Eastern Bantu ritual system the actions of wizards, demons and ghosts are interwoven in complicated ways and to which of them attention will be directed by the diviner in any situation it is, on the evidence available, impossible to say.

The South-Eastern Bantu have very incomplete conceptions of "gods." They may be said to have two of these gods, Heaven (representing storms and certain other dread phenomena) and a "First Man" who initiated the life of men. The Zulu have in addition a certain goddess, Nomkubulwana, who figures in hoeculture. The First Man (Zulu Unkulunkulu) does not figure at all in ritual practice; he is one of Seligman's "otiose High Gods"; he is merely a final reference in mythology to explain such facts as creation and death. Heaven appears in ritual chiefly as a vast destructive power, more or less personified, in situations of tribal catastrophe such as drought, floods, locust invasions, blight, and among the Thonga in the birth of twins. In ordinary life Heaven is referred to when a man is killed by lightning, suddenly and inexplicably. Thus Heaven is evoked in South-Eastern Bantu consciousness rarely and

¹ Vide the author's "Zulu Women in Hoeculture Ritual," Bantu Studies Journal, Johannesburg, September, 1935.

in overwhelming situations.¹ Usually attention is directed to ancestors and wizards. And to deal with Heaven there are therefore special ritual techniques conducted by magical specialists of high standing.

Viewing the problem comparatively one notices that the ancestral cult is seldom found with a deistic ritual. In Hebrew history the religion of Jahweh had continually to struggle with the tendency to approach the dead.2 Generally the idea of "High God(s)" seems to be found in simple undifferentiated communities such as the Bushmen, Hottentots, Andamanese and Australians, and in communities with a highly developed centralised organisation, such as the Egyptians, Romans and certain Bantu,3 In fact in these latter communities the development of the political organisation seems to be accompanied, where there is not already belief in a High God, by the growth of the god. Where the belief exists the head of the state becomes defender or representative of the god. In South-Eastern Bantu ritual the ancestors of the chief are almost gods already; in Hebrew history the development of the state sees the growth of Jahweh; in Roman history the emperor becomes deified. In such communities one tends to find the divine king, as Seligman recorded of the Shilluk. Throughout Africa the political development of the tribe shows this tendency to deify the chief's ancestors and ultimately the chief himself, as might have happened to Shaka if he had not been assassinated. Certainly one may observe it of the Ashanti, Baganda and Rozwi chiefs.4

To sum up the comparisons as applied to the South-Eastern Bantu, one finds that social morphology affects death customs and the belief in immortality in that under their mode of life and social organisation they have an ancestral cult which is a means of maintaining kinship groupings; it is accompanied by inchoate ideas about the existence of the soul in the living and after death, and the future existence of the ghost is reflected in mortuary customs. The ancestors of the chief are tending to become gods; other gods are on the whole unimportant.

In South-Eastern Bantu society then the ancestral cult is the chief aspect of immortality (in the sense of continued existence for a time after death, not eternal imperishability), and it is related to the lineage; it has little social importance for individuals as compensation for death. Emotional value in that way it may have. However when Manyibane

¹ Evans-Pritchard says much the same of the Zande Mbori. Evans-Pritchard (c).

² Hastings (a) loc. cit.

³ Ibid.

⁴ c.f. Junod's comparison of the Thonga, Ila and Akamba. loc. cit. And are not Mussolini and Hitler almost gods?

the Thonga lay dying his care was not for his soul but to settle his affairs on earth. Yet death is not conceived to be of the natural order. In no society is that admitted. Death myths express both the desire for life and the recognition of death as a fact. Death is unnatural as the mythical causes of it show for it is introduced to man as the result of negligence or evil, and usually the cause is very minute, e.g. a chameleon's pausing to eat berries, the eating of an apple, a bird's singing. It is always an upsetting of previously existing conditions in which dying had no meaning for man.¹

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A PRACTICAL ORTHOGRAPHY FOR TSWANA

Recommendations of a Conference representing the Education Departments of the Bechuanaland Protectorate, the Cape, the Orange Free State, and the Transvaal, together with the Inter-University Committee for African Studies, held at Johannesburg on April 28, 1937.

The orthography set out in the present pamphlet represents the latest result of a prolonged series of efforts made, at the instigation of the Inter-University Committee for African Studies, by the Education Departments of the territories in which the main bodies of Tswana speakers are concentrated, to arrive at a uniform orthography of Tswana, at once practical and reasonably scientific in character, to replace the numerous and heterogeneous varieties of orthography current for various forms of the language.

In order to appreciate to some extent the nature of the efforts made to deal with this question, as far as officially-constituted and recognized bodies were concerned, during a period now close upon nine years in length, it will be advantageous to summarize the main events leading up to the settlement of Tswana orthography which is here proposed.

MAIN EVENTS LEADING UP TO PRESENT SETTLEMENT

- 1. The last previous effort at arriving at a uniform orthography for Tswana dated from February 1910, when a conference, called at Johannesburg under the aegis of the British and Foreign Bible Society, evolved the orthography which has been used up to the present by the London Missionary Society, with some minor variations, and which may be referred to for the sake of brevity as the 1910 Orthography. This orthography allowed for certain variations in the writing of dialects other than that (Tlhaping) employed by the London Missionary Society, and was not uniformly applied by other denominations; nor was it uniformly accepted by Native writers. By 1928, the number of orthographies in use for various dialects of Tswana, and even for the same dialect by various writers, had increased.
- 2. In July, 1928, the Advisory Committee on Bantu Studies and Research, the predecessor of the present Inter-University Committee for African Studies, considered the question of the orthographies of the South African Bantu languages, and appointed a sub-committee, the

Central Orthography Committee, to take charge of the question of reforms in the various orthographies.

- 3. The Central Orthography Committee, in November, 1928, set up sub-committees for the various language-groups, and appointed, *inter alia*, a sub-committee, the Suto-Pedi-Chwana sub-committee, as it was then styled, with instructions to attempt to evolve a uniform orthography to serve the three main sub-divisions of the Sotho group, i.e. Southern Sotho ("Suto"), Northern Sotho ("Pedi"), and Tswana ("Chwana"). This sub-committee evolved an orthography, largely on bare-majority voting, of a nature so unsatisfactory to all concerned that the Central Orthography Committee felt itself quite unable to endorse the recommendations.
- 4. The Central Orthography Committee, at its meeting in May, 1929, had three main facts to consider in this connection: (i) that no changes in the orthography of Southern Sotho would be accepted by the Basutoland Administration, the official body mainly concerned with this language; (ii) that the orthography evolved by the Suto-Pedi-Chwana sub-committee was unsatisfactory to all concerned, and (iii) that the meeting of the latter sub-committee had shown wide discrepancies in outlook between the representatives of Northern Sotho and of Tswana respectively. It therefore resolved (a) not to endorse the sub-committee's recommendations, and (b) to discontinue the Suto-Pedi-Chwana sub-committee, and to appoint in its place two fresh sub-committees, (1) the Transvaal Sotho sub-committee, as it was then styled, to deal with Northern Sotho, and (2) the Cwana sub-committee, as it was then styled, to deal with Tswana.
- 5. The Cwana sub-committee met in October, 1929, and evolved an orthography, largely by bare-majority voting, and one which did not, in the opinion of the Central Orthography Committee, fulfil the unificatory or scientific requirements which might legitimately be demanded of it. The Transvaal Sotho sub-committee also met in the meantime, and evolved an orthography which, while acceptable to the Central Orthography Committee from the unificatory and scientific point of view, was considerably at variance with that evolved by the Cwana sub-committee.
- 6. The Central Orthography Committee, in January, 1930, accordingly referred back to the Cwana sub-committee the orthography proposed by it, with the request to accept for Tswana, if possible, the recommendations of the Transvaal Sotho sub-committee for that language.
- 7. The Cwana sub-committee, in February, 1930, accepted, nem. con., the proposals of the Transvaal Sotho sub-committee for application in

the case of Tswana, with one alteration: the substitution of x for g to represent the voiceless velar fricative. This alteration the Transvaal Sotho sub-committee subsequently decided to accept also for that language, for the sake of uniformity with Tswana.

- 8. The Central Orthography Committee, in July, 1930, accepted the new proposals of the Cwana sub-committee, and published them.
- 9. In November, 1930, a conference of representatives of the four educational administrations concerned, i.e. the Bechuanaland Protectorate, the Cape, the Orange Free State, and the Transvaal, considered the administrative action to be taken in the application of the various new orthographies proposed, *inter alia* that for Tswana, and resolved to refer the question of Tswana orthography to a further conference of education authorities.
- 10. In December, 1930, a conference of representatives of the Bechuanaland Protectorate, at which members of the Central Orthography Committee were present, discussed a proposed orthography for Tswana, at variance on certain points with that evolved by the Cwana subcommittee and endorsed by the Central Orthography Committee.
- 11. In November, 1931, a conference of education authorities representing the Bechuanaland Protectorate, the Orange Free State, and the Transvaal, met again at Bloemfontein, and evolved an orthography which, while differing from the Mafeking orthography, differed also, in three main respects, from the Tswana orthography endorsed by the Central Orthography Committee.
- 12. Various abortive attempts had been made in the meantime to introduce the Central, the Mafeking, and the Bloemfontein orthography respectively, and various unofficial and purely sectional committees had been set up which evolved still further variants of orthography, largely on the lines either of the 1910 or of the Bloemfontein orthography. Confusion on the orthographic question had become worse than ever.
- 13. The Central Orthography Committee, in the course of 1936, had approached the four educational administrations concerned with a view to the re-opening of the Tswana orthography question, in a last attempt to bring some order into the hopelessly chaotic situation in which matters had landed. As a result, a meeting of representatives of the Education Departments of the Bechuanaland Protectorate, the Cape, the Orange Free State, and the Transvaal, together with the Inter-University Committee for African Studies, which had replaced the defunct Advisory Committee on Bantu Studies and Research as the parent body of the

Central Orthography Committee, met at Johannesburg in February, 1937. At this meeting it was decided to call together a conference of official as well as non-official representatives of the four educational administrations. This conference was to vote and settle the three outstanding differences existing between the Central and the Bloemfontein orthography.

14. A Conference, in terms of §13 above, accordingly met at Johannesburg in April, 1937. It voted on the three points of difference between the Central and the Bloemfontein orthography. It also discussed other points in Tswana orthography, but after voting decided to adhere, as far as these points were concerned, to the Central orthography. By implication, it endorsed the Central orthography on all points which were not discussed.

The present pamphlet has been compiled by the undersigned, at the request and with the assistance of the Chairman of the Johannesburg Conference, Prof. C. M. Doke. Its purpose is, firstly, to trace the history of the present orthography settlement, as has been done above; and, secondly, to set out the principles of the new orthographic settlement adopted, explicitly and implicitly, by the Johannesburg Conference.

PROPOSALS OF THE JOHANNESBURG CONFERENCE

A. REPRESENTATION OF SOUNDS

I. VOWELS

а	kwala	write
ê	êma	stand
e	tsela	road
	setlhare	tree
	motseng	in the village
i	thipa	knife
6	bôna	see
0	kopa	beg
	mosadi	woman
	ntlong	in the house
u	ruta	teach

N.B. 1. Double vowel-symbols will normally be employed to indicate only actual doubling of the vowel-sounds, i.e. for cases where two identical vowels succeed each other forming separate syllables and having independent length and tone, as in baakanya, get ready, péélélô, engagement, diile, have delayed. They may also be used in certain cases to indicate the length-

ening of a single vowel-sound, for which see below under LENGTH.

- 2. Tone-differences are not to be indicated by using different vowel-symbols in syllables having identical vowels but different tone. Thus the practice of indicating the difference between o, you, and o, he, she, it, by writing the one as o and the other as u, or of indicating the difference between ke, I, and ke, it is, by writing the one as ke and the other as ki is to be abandoned. O, you, is to be capitalized in all cases; and when it is necessary to capitalize o, he, she, it, as at the beginning of sentences, or in referring to the Deity, it is to be distinguished by the acute accent (') indicating its primary high tone. In all other cases tone-marks are to be used, when necessary, to distinguish similar pairs of words. See below under TONE.
- 3. e and o are each used to represent three different varieties of sound, viz. the normal, the raised, and the lowered varieties of the e and o phoneme respectively.

II. SEMI-VOWELS

- N.B. 1. w and y replace o and e in all cases where these latter were formerly used in some systems to indicate semi-vowels or non-syllabic vowels, the use of o and e being restricted in the present system to the representation of purely vocalic sounds.
 - 2. The use of y in some systems to indicate a phoneme containing several consonantal varieties is replaced by the use of j, for which see below.

III. CONSONANTS

(a) Nasals:

mother house despise me sheep see ye
-

- N.B. 1. Syllabic m occurs before non-syllabic m and before all voiceless labial explosives. It is written m. Syllabic n occurs
 before non-syllabic n and before all voiceless alveolar explosives.
 It is written n. Syllabic ny occurs before non-syllabic ny and
 before all voiceless palatal explosives. It is written n.
 Syllabic ng occurs before non-syllabic ng, before all voiceless
 velar explosives, and as a final syllable in locatives and
 imperatives. It is written n in the first two cases, and ng in
 the last.
 - 2. No confusion can be caused by the use of n to represent the three varieties of syllabic nasal, as the succeeding consonant determines without ambiguity what value is to be given to the symbol in each case.

(b) Explosives and Affricates:

(i) Voiceless Labial

p	pitsa	pot
ph	phagê	wildcat

N.B. 1. The following affricates occur in some Eastern Tswana dialects and sporadically elsewhere:

ps	mpsa	dog
pš	mpša	dog
ÞУ	mpya	dog
psh	ipshina	enjoy oneself
pšh	pšhatla	crush
phy	phyaphya	clap hands.

The value of the sounds to be attached to the symbols here used can be deduced from the general scheme set out in this memorandum. It is not suggested that these symbols be incorporated into the standard Tswana alphabet, or that the forms here shown, and similar dialectal forms, be incorporated into standard written Tswana.

(ii) Voiceless Alveolar

t	taga	intoxicate
th	thaba	hill
ts	tsaya	take
tsh tshipi		iron
tš.	tšoga	get un

tšh tšhaka battle-axe tl tloga depart tlh tlhapi fish

- N.B. 1. ts interchanges dialectally with tš (tsoga, tšoga) and tsh with tšh (tshukudu, tšhukudu, rhinoceros). It is suggested that each dialect use the symbols appropriate to the sounds it employs.
 - 2. tl interchanges dialectally with t (interdental ejective), and tlh with th (interdental aspirate), as in tla, ta, come; tlhôka, thôka, be without. As this interchange is completely regular, it is suggested that tl, tlh be written in all cases, and pronounced with the sound appropriate to the dialect employed.
 - (iii) Voiceless Velar

k noka riverkh khunou redkg kgama hartebees

- N.B. 1. The combination kg is aspirated; but since the unaspirated form does not occur, it is not necessary to indicate the aspiration.
 - (iv) Voiced Labial

b bala read

- N.B. 1. b represents a diaphoneme having two members, (1) the voiced bilabial explosive, and (2) the voiced bilabial fricative.

 The first is the most common, the second occurs only sporadically. The two interchange regularly, however, and can accordingly be represented without ambiguity by the same symbol.
 - 2. The affricate by, as in byalo, thus, is found sporadically, chiefly in some Eastern Tswana dialects. It is not suggested that the symbol by be added to the standard Tswana alphabet, or that the forms in by be incorporated into standard written Tswana.

(v) Voiced Alveolar and Velar

The voiced alveolar and velar explosives occur only sporadically in some little-known Tswana dialects. The voiced alveolar explosive occurs further in the pronunciation of some

speakers as a variant of the phoneme represented by d (see below). It is not proposed to legislate for the representation of the voiced alveolar and velar explosives separately.

(c) Fricatives:

(i) Voiceless Labial

f fêla only

- N.B. 1. f represents a diaphoneme which has three varieties, (1) voiceless bilabial fricative, (2) voiceless labio-dental fricative, (3) voiceless glottal fricative. The voiceless glottal fricative occurs further as a separate diaphoneme in most Tswana dialects in a certain limited number of words. It has been decided to adopt f to represent the first, and h to represent the second, of these diaphonemes.
 - 2. In the case of dialects in which the sound represented by h occurs in both cases, the determination of the particular diaphoneme to which the sound belongs can be made in many cases by references to the form assumed by the relative words if and when subject to initial strengthening. If the strengthened form is ph the sound belongs to the f-diaphoneme; if it is kh, the sound belongs to the h-diaphoneme; e.g. fula (strengthened form e.g. phul6), but huma (strengthened form e.g. khum6).
 - 3. The affricates fs and fy occur sporadically, the former as a member of a phoneme comprising three varieties, the second as a member of a phoneme comprising two varieties. The use of fs to represent the first, and of fy to represent the second of these phonemes is recommended, where it is desired to represent these sporadic pronunciations: their incorporation into the standard Tswana alphabet is, however, not proposed.
 - (ii) Voiceless Alveolar and Palatal

s se it š šôka twist

- N.B. 1. s represents the "hissing" fricative (cf. English s in sun), s the "hushing" fricative (cf. English sh in ship).
 - 2. The two sounds alternate dialectally, as do the combinations ts, tš, tsh, tšh, in which they occur, e.g. lesome, lešome, ten.

The alternation is not, however, regular: the two sounds do not alternate invariably—sa, still, and ša, name, are found everywhere; and they may alternate in inverse order—s of a given dialect corresponding to š of another dialect in some cases, while š in the same given dialect may correspond to s of the other dialect in other cases. It is suggested that s and š be employed in all such cases to denote the sound actually occurring in a given position in the dialect which is being written.

(iii) Voiceless Velar and Glottal

g geloga turn back h huma be rich

- N.B. 1. h represents a diaphoneme containing, in most Tswana dialects, but a single member, the voiceless glottal fricative, which occurs only in a limited number of words, chiefly as preceding the vowel u. The symbol h is used to represent this diaphoneme in contradistinction to the symbol f which represents another diaphoneme, also containing as one of its members the sound h, the latter occurring, however, in a different set of circumstances. See above under N.B. 1 referring to the voiceless labial fricatives.
 - 2. h also represents aspiration, e.g. in kh, ph, th.
 - (iv) Voiced Labial

The voiced labial fricative, and a voiced labial affricate with a voiced labial fricative as its first member, occur sporadically, the first as variant of the voiced labial explosive, with which it interchanges regularly, the second as variant of the affricate containing the voiced labial explosive as its first member. Both the voiced fricative and the voiced fricative affricate can be represented without ambiguity, respectively by b, and, when it is desired to use such symbol, by by.

(d) Miscellaneous Voiced Consonants

j ja eat
r rona we
l lala lie down
d didiba wells

N.B 1. j represents a diaphoneme which has five members: (1) a voiced prepalatal explosive, (2) a voiced alveolar "hushing" frica-

tive, (3) d (see below) with an alveolar semi-vowel glide, (4) d with a voiced alveolar "hushing" fricative, (5) d with a voiced alveolar "hissing" fricative, the first four common, the last extremely rare. The different varieties interchange regularly, and may be represented without confusion by the same symbol.

- 2. j is now used where y was previously used in some systems, the use of y being transferred to the representation of the voiced alveolar semi-vowel.
- 3. r and l both occur syllabically as well as non-syllabically. The former occurs only before non-syllabic r, the latter only before non-syllabic l, as in rra, father (sometimes found as rara) and lla, cry, (sometimes found as lela). No separate symbols are needed to represent the syllabic sounds.
- 4. d represents a diaphoneme which has different members in different dialects, and even with different speakers of the same dialect. Generally, it is found as a semi-flapped alveolar lateral fricative. A true alveolar voiced explosive is also sometimes found, chiefly under foreign influence. All the varieties of the diaphoneme interchange with each other regularly, and may therefore without ambiguity be represented by the same symbol.

IV. LABIALIZATION

Back labialization is indicated by the insertion of w after the labialized consonant or consonant-group. The following are examples: nw (nwa, drink); ngw (ngwana, child); nyw (anywa, variant of anyiwa, be sucked); tw (ntwa, war); thw (thwane, lynx); tsw (tswa, variant of tšwa, come from); tshw (tshwara, variant of tšhwara, hold); tšw (tšwa, come from); tšhw (tšhwara, hold); tlw (utlwa, hear); tlhw (ntlhwa, brown); kw (kwala, write); khw (sekhwana, bag); kgw (sekgwakgwa, frog); sw (tloswa, variant of tlosiwa, be removed); šw (šwa, die); gw (gwêtla, bleat); rw (rwala, carry); lu (lwala, be ill).

B. REPRESENTATION OF SOUND-ATTRIBUTES

I. STRESS

Stress, though existing as a sound-attribute in Tswana, is not semantically significant, except for purposes of dramatic speech. Accordingly, no recommendation is made as to its representation.

II. LENGTH

- 1. Three types of length occur: (1) prolonged length, significant only for purposes of dramatic speech; (2) short length, and (3) long length, the last two semantically significant. Long length occurs on the penultimate syllable of a normal statement, short length in every other position, including the penultimate syllable of a normal question; and the difference in length of the penultimate syllable may in certain cases be the only distinction between a statement and a question. Since the question-mark indicates this difference in writing, it is not necessary to mark the length-difference, and accordingly no recommendation is made as to the representation of length.
- 2. In certain dialects, single vowel-sounds are lengthened in cases where in other dialects unlengthened vowel-sounds occur. In such cases, double vowel-symbols may be employed, at the discretion of the writer.

III. TONE

- 1. Although semantically-significant tone is a marked feature of Tswana, the context shows in most cases what tones are appropriate, and accordingly it was felt unnecessary to make recommendations for the marking of tone throughout.
- 2. In cases where the context does not show what tones are appropriate, the use of the acute accent (') to indicate primary high tone, and of the grave accent (') to indicate secondary high tone (i.e. a tone originally low, but raised in accordance with the tonetic rules of the language) is recommended, in order to distinguish between otherwise identical pairs of words. Writers should use only the minimum number of tonemarks which will make the required distinction clear. Thus to distinguish between the two meanings of Ke a bôna (I see and They are theirs) it would be sufficient to write ke as ke in the first case and as ké in the second. Similarly, in order to distinguish between the different interpretations of Ba tsile ke dutse (They came and I sat down and They came while I was sitting), ke might be written as ke in the first case and as kè in the second. See also above, N.B. 2 under Vowells.

¹ Note that this subsidiary recommendation regarding the method of tone marking differs somewhat from the recommendation in the pamphlet published in 1930, but practice in Northern Sotho has shown the value of the use of the two accents given above.

C. WORD-DIVISION

The retention of the disjunctive system of word-division hitherto followed in Tswana is recommended. Special problems in this connection should be legislated for as occasion arises. The only point on which a recommendation was felt to be necessary at present is the writing of the long form of the present indicative of verbs. In this case the writing of the various forms as ke a rata, O a bôna, o a tsamaya, etc., is recommended.

D. SPECIMEN TEXT IN THE ORTHOGRAPHY RECOMMENDED

THE TWENTY-THIRD PSALM

Jehofa ké modisa wa me ; ga nketla ke tlhôka sepê.

- O mpothisa mo mafulong a matalana: O nkgôgêla kafa metsing a a didimetseng.
- O rudisa môya wa me ; O ntsamaisa mo ditseleng tsa tshiamô ka ntlha ya leina ja gagwê.
- E, me le fa ke ralala mogôgôrô wa moruti wa lošo, ga nketla ke boïfa bošula bopê; gonne O na le nna: kgoge ya Gago, le thôbane ya Gago, tšôna di a nkgomotsa.

Wa tlo O baakanye bojêlô fa pele ga me, mo ponong ya baba ba me :

O tloditse tlhôgô ya me ka loukwane ; senwêlô sa me se a penologa.

Rure molemô o tla ntshala moragô le boutlwêlŷ-botlhoko, ka malatsi aotlhe a go tshela ga me; me ke tla aga mo tlung ya ga Jehofa ka bosakhutleng.

G. P. LESTRADE.

BOOK REVIEWS

Die Logone-Sprache im zentralen Sudan. By Johannes Lukas. Leipzig 1936. Published by F. A. Brockhaus for the Deutsche Morgenländische Gesellschaft as No. XXI. 6. of the series Abhandlungen für die Kunde des Morgenlandes.

This book is one of the results of the author's field-work in the Lake Chad area, undertaken in 1933 as a Fellow of the International Institute of African Languages and Cultures. Dr. Lucas' main object was the investigation of the Kanuri language; but this was supplemented by work on other languages as well, among them Logone. The present volume gives Dr. Lucas' own results, as well as incorporating some of the material gathered by Nachtigal, the noted German explorer and leader in German colonial enterprise in West Africa.

The work consists of (1) an introductory chapter, detailing the origin of the book, and giving some general information about Logone, its terrain, its speakers, and its position relative to certain other languages; (2) a description of Logone phonetics and phonology; (3) a description of Logone morphology and syntax; (4) several Logone texts, with German translation; and (5) a Logone-German and a German-Logone vocabulary.

Logone belongs to a small sub-group of languages collectively known as Kotoko, to the south of Lake Chad; and this in its turn is a member of a larger group which Delafosse had named Nigero-Chadian, but for which, on account of its strong Hamitic affinities, Dr. Lucas has proposed the designation Chado-Hamitic. The author has already discussed some of these points in a preliminary way in two articles, firstly Die Gliederung der Sprachenwelt des Tschadseegebietes, in Forschungen und Fortschritte, 1934, No. 29, pp. 356-7, and secondly The Linguistic Situation in the Lake Chad area in Central Africa, in Africa, Vol. 9, pp. 332-49. These articles, as well as the fresh material presented in the work under review, make the strongly Hamitic affinities of Logone, and of the group to which it belongs, clear beyond dispute.

Even the most cursory inspection of some of the most salient points of the language will serve to show, however, that it is of heterogeneous affinities. The phonetic system, besides, incidentally, appearing to be much less complicated than the author claims, is also much less Hamitic in character than one might expect. The consonant-system, for instance,

is by no means rich in throat-sounds, either in variety or particularly in incidence. On the contrary, however, it possesses an almost complete series of implosives, besides a series of laterals, both explosive and fricative. The language is, further, a tone-language. These are Sudanic or Bantu rather than Hamitic features. The Hamitic affinities of the language appear much more clearly when we consider some of the grammatical features. There are two noun-classes, the conventional "masculine" and "feminine," and a complex system of plural-formation in nouns, including what the author terms inner plurals, reminding one strongly of the "broken plurals" found in Hamitic and Semitic languages. Gender is indicated in the third person of the verbal forms, where separate forms exist for masculine and feminine respectively. Two types of possessive construction occur, respectively by means of position and by means of a connective particle. There are few true adjectives; and the comparative scarcity of these is made up for by the employment of various periphrastic constructions of qualificative import. In the verb, we are struck by a comparative poverty in tense-forms, and by the substitution for tenses of forms indicating indefiniteness, completion and progressiveness rather than time. There is also a fair range of derivative verbal terms expressing various aspects of verbal action other than time. All this reminds us strongly, not only of the obvious Hamitic and Semitic parallels, but also of the state of affairs to be found in most Bantu languages.

G. P. LESTRADE.

Teaching. Volume 1, No. 1. April 1937 (Fort Hare. 2/6 per annum).

This little magazine comes from the Department of Education of the Fort Hare Native College. It intends to stimulate students and teachers to think about the real purpose of their work and to try to record the results of thought and experience.

It will deal mainly with the problems of educating Bantu children and however much one may feel that educational problems are in essence the same all over the world there is no doubt that there are particular difficulties to face in Native schools in South Africa. The editors wish for articles for publication as well as for subscriptions.

E.B.J.

Mayombsche Namen, by L. Bittremieux, 190 pp. 1934.

The first edition of this work was published in 1912. It treats of a subject of value to lexicographers, one that could well be studied in

many other Bantu languages. Bittremieux's study concerns the Yombe language spoken to the North of the Congo mouth. This language has been made known to us by Bittremieux's other studies "Mayombsch Idioticon" 1922-27 and the Grammatical Works of A. De Clercq (1907) and L. De Clercq (1921).

The author covers a very wide range of personal and family names. After a general introduction, he deals in turn with birth names due to some incident, fetisch names, names assumed by young men, dance names assumed by young women, names connected with black magic, names of chiefs (a large section) and nicknames. Each name is explained and much historical and ethnographic material of value is added. The whole book is artistically produced and contains numerous photographic illustrations.

A work of this kind gives a valuable insight into the Native mind. The name is so closely associated with the person that its significance is far greater among the Bantu than we are apt to credit. The change of name with change of status, circumstance or life crisis is important. Such studies are of extreme value also in lexicographical work, often revealing hidden meanings of words little known, and discovering many hitherto unrecorded or archaic words.

C.M.D.

Intlalo Ka Xosa, by T. B. Soga. (250 pp. Lovedale 1936, price 3/9.)

This is the third edition of Soga's work which was formerly published by the Gazette Office, Butterworth, under the title of *Intlalo yakwa Xosa*. This book contains the fullest account published in Xhosa of Xhosa customs, and the present edition is thoroughly revised and very considerably enlarged upon the previous editions. It is to be warmly recommended to all readers of Xhosa. The old orthography is still employed in this work.

C.M.D.

Ukwazi Kuyathuthukisa, by R. R. R. Dhlomo. (154 pp. illus. Shuter & Shooter, Pietermaritzburg, 1936.)

Dhlomo is already well known as a Zulu author, his biographies of Dingane and Shaka having been well received. This new book of his, "Knowledge means Progress," is designed as a school reader and describes observations principally on matters of Natural history and the lessons which may be drawn from them. The matter is good, and the illustrations by Miss Polson add to the value of the publication.

C.M.D.

A HANDBOOK OF SOUTH AFRICAN TRIBES

The Bantu-speaking Tribes of South Africa: an ethnographical survey.

Edited for the (South African) Inter-University Committee for African Studies by I. Schapera, 1937. Cape Town: Maskew Miller, Ltd., pp. 453. Photographs and map. 21s.

The need for a Handbook of South African tribes has long been felt, not only in the anthropological schools of South Africa and Great Britain but also by students of racial problems outside the universities. In recent years qualified South African scholars have made notable contributions to the ethnography of the peoples among whom they live : some of their researches are published in well known books, and others are scattered in not easily accessible journals. There are older works which, if produced in the pre-scientific age, have vet a value of their own as preserving evidence of customs and beliefs which have since been modified or become extinct. There was room for a comparative manual, surveying the whole field and gathering into succinct form the well-tested results of research. The authors of the present volume hope that it will fulfil with reasonable adequacy the purpose for which it was written. They may be reassured on this point. Some readers may have wished for fuller treatment of certain subjects and for reference to other subjects not treated at all; but taken as a whole the need has been excellently met. The book owes its origin to the initiative of the Inter-University Committee for African Studies. The editorship was originally entrusted to Professors W. M. Eiselen and I. Schapera, but pressure of other duties compelled the former to retire and Dr. Schapera carried on alone. He has gathered around him a fine team of collaborators, men and women with considerable firsthand knowledge of the peoples; some of the chapters embody material now published for the first time. The writing is generally clear, and there is a minimum of technical phraseology.

Such a book is difficult to review within a reasonable compass. All that one can hope to do is to give a summary of the contents and draw attention to some of the leading points.

Dr. R. A. Dart opens with a chapter on Racial Origins. His survey of the somatological evidence brings out the mixed character of the Bantu; but he can do no more than hint at their origin, and the chief impression he leaves is the inadequate quantity of the evidence and the hypothetical quality of conclusions to be drawn therefrom. Mr. A. J. H. Goodwin outlines the anthropogeography of the region and shows, as one of his conclusions, how the Bantu and non-Bantu tribes have distributed themselves in direct relation to the summer and winter rain areas

respectively. Dr. van Warmelo surveys the traditional history of the tribes and their distribution in groups: Nguni, Shangana-Tonga, Sotho, Venda and Lemba. It will be observed that the tribes of S. W. Africa have been omitted from the book. Mrs. Hoernle's treatment of social organization is competent. She deals first with the general or fundamental organizing principles common to all the groups and then with distinctive modifications of the principles by the several groups. She takes the Nguni as her pattern of reference. Some of her topics, e.g. the Chief, necessarily recur in other chapters. We come nearer the actual living African when Mrs. Krige describes Individual Development--child life, education and initiation, sex life and marriageand Professor Lestrade the domestic and communal life. Mrs. Krige properly notes various features of the indigenous "schools" and points out their success in inculcating obedience, discipline and general good behaviour—where all too frequently our modern schools conspicuously fail. A footnote warns against too hasty judgments as to certain aspects. for "we know very little of the schools." She offers no definite theory of ukulobola: it is compensation to restore a disturbed equilibrium, but it is more. She sums up: "Lobola has many aspects; but its importance lies in the fact that lobola is marriage and to the Southern Bantu marriage without lobola is inconceivable." Professor Lestrade wisely bases his generalized description of the domesticities upon his knowledge of a single group, the Northern Sotho, and succeeds admirably in drawing a picture of things too often omitted from ethnographical treatises. Mr. A. J. H. Goodwin contributes to the chapter on Work and Wealth which is mainly written by Dr. Schapera, who also deals with political institutions in an excellent account of the status, privileges and duties of the Chief and of the responsibilities of the Councils. It still needs saving that the despots like Shaka do not represent the normal Bantu chieftainship. As the southern Sotho say: Morena ke morena ka batho: "A chief is chief by (the grace of) the people." We miss one thing of some historical importance in this chapter: a mention of the mechanism by which a whole clan or tribe comes under the Chief of another tribe as his vassals. The payment of the peho signified the vassalage, for example, of the Barolong of Thaba Nchu to Moshesh. Dr. Schapera also treats very adequately of Law and Justice-adequately, that is to say, within the narrow limits of a single chapter. Mrs. Hoernlé deals in a pleasingly sympathetic manner with Magic and Medicine, reminding us that these beliefs and practices are not manifestations of a kind of mentality with which the European has nothing in common—which is also a thing that still needs saying. She draws a useful distinction between the sorcerer and the witch, the former acting consciously and deliberately and the

latter unconsciously by reason of an unfortunate inherited disposition. A further distinction is that witchcraft "involves belief in manifestly impossible happenings," whereas " many of the practices included under sorcery definitely are possible." Not all the Bantu draw such a distinction; even the few that do so have the same name for the two classeswitches and sorcerers are both baloi. The chapter on Religious Beliefs and Practices is written conjointly by Drs. Eiselen and Schapera. Their treatment of the "soul" is too meagre; one is surprised that moya should be described as "immortal soul" and that no question is raised as to mova (originally "the breath") having been given an extended meaning by the missionaries. No indication is given that the southern Bantu, like many in the north, ever believed in reincarnation. It is questionable to write of "worship of ancestors" unless in Willoughby's sense of the word: "Bantu worship is Bantu social intercourse carried over into the spirit world." One would have liked the sections on "High Gods and other Deities" and "Religion and Morality" to be given fuller treatment. It seems strange to see Thikoloshe, Loowe and Dingwe included among "deities." Three admirable chapters follow written by acknowledged masters of the subjects: Musical Practices, by Professor Kirby; Traditional Literature, by Professor Lestrade; and Language by Professor Doke. Dr. Kirby brings in the Hottentots and Bushmen because of their influence upon Bantu music. Mr. Lestrade gives a sympathetic appreciation of the literature, whose value he assesses in these words: "We may perhaps be not altogether unjustified in asserting that this simple product of the primitive Bantu genius may justly claim our attention and respect both for its marked individuality of spirit and execution and for the true and fundamental artistic principles upon which it has based itself." Dr. Doke's contribution, in which he deals with Bantu grammar according to its genius, getting away from the old style of pressing it into a European mould, may be taken, we presume, as a foretaste of his eagerly awaited Comparative Grammar of Bantu.

So far the book has dealt with the Bantu as they were. To leave the story there would, of course, be quite misleading. The Bantu are no longer what they were: their life in its every phase has been permanently affected by contact with Europeans. The remaining chapters are an exercise in the new anthropology: the study of the Changing Native. Here the writers have tried to be as objective as in the previous chapters and to leave judgments to their readers, but certain judgments inevitably escape them. This part of the subject has been more fully treated in the other notable book edited by Dr. Schapera, Western Civilization and the Natives of South Africa. One chapter has not yet been written—we

could wish it had been added: one dealing with the effects upon the Europeans of contact with the Bantu.

Dr. J. S. Marais first writes an historical chapter on the imposition and nature of European control, sketching the events through which the Bantu lost most of their land, the conflict between the southern and northern traditions in Native policy and the victory of the latter. He stops short of the abolition of the Cape Native franchise in 1936. This is his summary: "What has been said may give support to the conclusion that the position of Natives throughout the country has become worse since 1910. Rights they formerly enjoyed have been abolished or have become precarious; the principle of anti-Native discrimination has been extended into a number of new fields, and new ways of enforcing it have been devised."

The modern Bantu in the Union may conveniently and simply be classified into reserve, farm and urban dwellers. These have been affected in different ways and degrees by European influence. Dr. Schapera writes of cultural changes in tribal life; Dr. Monica Hunter on the farm-dwellers, and Mrs. E. P. Hellmann on the Native in the towns. In his summary Dr. Schapera draws a distinction between the Christianised and the pagan tribes. In the former, where Christianity is the tribal religion, European institutions are now fully part of the tribal culture, enriching it or replacing elements formerly existent. The modern culture displays more variations than did the old, but these do not now reflect two different cultures in opposition: the tribe is a single unit. In the pagan tribes, which are the majority, the conflict between the old and the new is still observable. The effect of missionary enterprise necessarily enters into Dr. Schapera's analysis, alongside of the effect of government and trade and other things. Some of his readers will not be altogether satisfied with his treatment. The aim of the missionaries is described in somewhat peculiar terms on page 360; and some of us would ask how far Dr. Schapera's experience entitles him to pass the sweeping judgment that "not many are sincere in their profession of faith or strive to lead a true Christian life." Of the Bantu as a whole he states an incontrovertible conclusion: "they have now been drawn permanently into the orbit of Western civilization," but he sees that they are not likely to carry on that civilization in its purely European manifestations. A South African civilization is developing with peculiarities of its own based upon juxtaposition between White and Black. Europeans occupy in it the position of a race-proud and privileged aristoracy, while the Natives, although economically indispensable, are confined to a menial status from which few of them are able to emerge with success. In spite of all depressive efforts the Bantu are being drawn more and more into the common cultural life of South Africa. What position they will ultimately occupy therein, Dr. Schapera wisely does not venture to prophesy. Dr. Monica Hunter summarises the contents of Part iii of her great book, Reaction to Conquest, in describing the depressed existence of the Bantu farm-dwellers who form approximately 35 per cent. of the total Native population of the Union. And finally Mrs. Hellmann tells of the increasing urbanization and of the conditions under which the urban Bantu exist. These are undergoing three processes, assimilation, urbanization and detribalization. She will not say that they are detribalized en bloc and on p. 430 she defines the criteria of detribalization in a useful manner. The subject is one that calls for further systematic research; her own experience and other available evidence suggest that Native culture is not being generally submerged by European culture but is undergoing readjustment and modification. A synthesis is emerging.

We have noticed few misprints; on page 304 "dissimilating" should be "dissimulating."

EDWIN W. SMITH.

INTER-UNIVERSITY COMMITTEE FOR AFRICAN STUDIES

GRANTS-IN-AID OF RESEARCH

Attention is drawn to the fact that the Inter-University Committee for African Studies has certain limited funds at its disposal for research in the languages and cultures of Africa. Application forms for grants-inaid of research may be had on application to

The Honorary Secretary,
Inter-University Committee for African Studies,
P.O. Box 1176,
Johannesburg.

Completed application forms should reach the Secretary not later than August 31st, 1937, in order that the applications may be considered at the next meeting of the Committee.

PUBLICATION OF RESEARCH IN THE LANGUAGES AND CULTURES OF AFRICA

Research Workers in "the languages and cultures of Africa" are encouraged to send unpublished MSS. to the Inter-University Committee for African Studies for their consideration with a view to assistance in publication. Address such MSS. to the Hon. Secretary, Inter-University Committee for African Studies, Box 1176, Johannesburg.

INTER-UNIVERSITÊRE KOMITEE VIR AFRIKANISTIEK TOELAES TEN BEHOEWE VAN NAVORSINGSWERK

Aandag word daarop gevestig dat die Inter-Universitêre Komitee vir Afrikanistiek beperkte geldsomme beskikbaar het vir navorsing in die tale en kulture van Afrika. Applikasie-vorms vir toelaes ten behoewe van navorsingswerk is op aansoek verkrybaar by:

> Die Ere Sekretaris, Inter-Universitêre Komitee vir Afrikanistiek, Posbus 1176, Johannesburg.

Ingevulde applikansie-vorms moet die Sekretaris nie later as 31 Augustus, 1937, bereik opdat applikasies op die eersvolgende vergadering van die Komitee in aanmerking kan kom.

PUBLIKASIE VAN NAVORSINGSWERK IN DIE TALE EN KULTURE VAN AFRIKA

Navorsers in "die tale en kulture van Afrika" word aangemoedig om onuitgegewe manuskripte aan die Inter-Universitêre Komitee vir Afrikanistiek in te stuur, om vir hulp by publikasie oorweeg te word. Manuskripte moet aan die Ere-Sekretaris, Inter-Universitere Komitee vir Afrikanistiek, Posbus 1176, Johannesburg, gerig word.

THE HUT DISTRIBUTION GENEALOGY AND HOMOGENEITY OF THE |² AUNI-≠KHOMANI BUSHMEN

By RAYMOND A. DART

It was my good fortune to participate in the expedition to the Kalahari in July 1937, under the auspices of the University of the Witwatersrand, and assisted by Dr. John F. Maingard and Messrs. E. W. Williams and H. Hall, to take measurements, facial casts and other observations on the group of Bushmen, which were being collected by Mr. Donald Bain for the Empire Exhibition at Johannesburg later that year. Very few Bushmen remain as such culturally and linguistically to-day in the Union of South Africa; in fact it is asserted that over half of those that are still living were in this camp. They represent the relics of the Southern Bushmen once spread from the Kalahari to the Cape, those generally acknowledged to be the purest of the Bushman type.

It was for this reason and at her special suggestion that Mr. Bain followed Miss Bleek's advice of going to this territory at the furthest confines of the Union, where it borders on Bechuanaland and South-West Africa, so that to the limit of human possibility the best examples of the Bushman type should be secured for public exhibition. Such an occurrence provided an opportunity as nearly ideal, as is available to-day, for determining by all the means at our disposal the racial constitution of this ancient people and to compare the data secured with the osteological and somatometric information acquired here during the last fifteen years.

Observations upon the Bush peoples in the past have necessarily been conducted upon individuals whose familial inter-relationships were either poorly understood or entirely neglected. Mr. Donald Bain's objective resulted in the collection of tolerably homogeneous family groups and it was our first and persistent aim to set on record a genealogical table of the entire party. Numerous individuals were cross-examined by Professors L. F. Maingard and C. M. Doke as well as by Miss D. Bleek, Dr. J. Maingard, Mr. H. Hall and myself, working separately or in collaboration, as opportunity offered both in the desert and subsequently in Johannesburg. The information embodied in the table represents as close an approximation to the truth as our collaboration and the memory of the Bushmen could guarantee.

The individuals were numbered and tagged in the order they were examined and no sufficiently good reason emerged subsequently for altering that enumeration so, for convenience of reference, we have adhered to it throughout.

THE SERIAL LIST OF BUSHMEN INVESTIGATED WAS AS FOLLOWS:—

No.	Name:	No.	Name:
1.	malxas.	34.	mamakas.
2.	!kweike or miki.	35.	!ka!kanu.
3.	koro or khoros.	36.	//khaku III.
4.	abraham or !gurice.	37.	!kuribe or !uribe.
5.	khanako or ganaku.	38.	!kx?un/i or !kh55/?i.
6.	klein /khanako or klein /ganaku.	39.	!kamku II.
.7.	marta.	40.	tamtam or tantan.
8.	lena or !khaixu.	41.	gom korop or khooi!koro.
9.	kuskai.	42.	/kaap.
10.	thobaku or txabaku.	43.	/ai/ai or /?ei/?ei
11.	atsani.	44.	alo⊙pwã II or khano⊙ka.
12.	tsaman II.	45.	!kxube or !khube.
13.	//?amme.	46.	alo⊙pwã III or khano⊙ka.
14.	!heixa or platkop.	47.	$\neq en$ or $\neq kh^{j}n$.
15.	!kai/ko or outanta.	48.	/kuruke or /koruke.
16.	≠ubeiku II or ≠kobekuu II.	49.	/kãwi II or ≠khau [?] i.
17.	//kabbe II or //kabe II.	5 0.	kata.
18.	am≠ari or ²am ²ari.	51.	keri keri.
19.	witteman or witman.	52.	//kobe II or /ove.
20.	!kwei/kan or !kooi!kan.	5 3.	lukas.
21.	mãmãs.	54.	suxuu VI.
22.	//am//na or //ga//na.	¹ 55.	lys or godas.
23.	≠gauke or gauce.	5 6.	!nansi or !nansi II.
24.	klein-ourooi II or kleinourooi.	57.	hokusa or hokusaa II.
25.	hokusa, hokusaa III or agusa.	58.	≠abaitu.
26.	kx?oukoi, //kx?au wei, //kaukwe	5 9.	tsap or sãsi⊙pwã.
27.	klein suxuu.	60.	klein taki or piet.
28.	//khaku or //?aku.	61.	uye or uje.
29.	haki.	62.	/abes or /?abes.
30.	ou tsamas.	63.	jan.
31.	ŋ!ka.	64.	khoitamas.
32.	!kweŋe.	65.	tsukoros II.
33.	/ues or /?uwe.	66.	//nwahu or //ywaxup.

No.	Name:	N	0.	Name:
67.	an ani or ãã yami.	7	73.	/unuu or /?unuu.
68.	ubukes or !kubutes.	7	74.	saap.
69.	alakap or kalakab.	7	75.	koos or amxa.
70.	tatabesa or kapala.	7	76.	maarman or /?uribe II.
71.	madekap or matabap.	7	7.	ari II or taap.
72.	atab.			

HUT DISTRIBUTION

The most natural way of the reader's becoming familiar with our 77 individuals and their relationships is by examining their distribution by families or hut groups and comparing these with the photographs (Plates 57 to 65) of such groups as we were enabled to assemble and with the details in the table of measurements and the genealogical table. Unfortunately there were some individuals such as No. 14 !heixa (Plate 71 etc.), No. 15 !kai/ko and No. 58 \(\neq abaitu\) (Plate 66 etc.), No. 74 saap, No. 75 koos, No. 76 maarman, No. 77 ari, No. 51 |keri/keri\) (Plate 81) and No. 55 lys, whom we were not able to photograph in their appropriate groups; further the group of No. 16 \(\neq ubeiku\) II (Plate 67 etc.) was not photographed as such.

In the Kalahari camp and at Johannesburg the party divided themselves up spontaneously into several groups with the following personnel:

Hut 1 of malxas

≠khomani speaking.

No. 1 3 malxas son of abraham, No. 2 \bigcirc !kweike (or miki) his wife, No. 3 \bigcirc koro their baby infant in arms.

(See Plate 57)

also

Plates 12, 13, 29, 42 and 53 for malxas and 47 for !kweike and 46 for koro.

Hut 2 of abraham

≠khomani speaking.

No. 4 \Im abraham (or !gurice), No. 10 \Im thobaku his second wife, No. 11 \Im atsani seven year old son of thobaku by a former marriage, No. 12 \Im tsaman II four year old and No. 13 \Im //² amme infant children of abraham and thobaku, No. 15 !kai/ko (or outanta) a senile woman of \neq ēīkusi (Vaalpens) origin, formerly the wife of abraham's first wife's (ou/khoro)'s

second cousin and of his own first cousin *tibitibi* and also the sister of No. $18 \ \bigcirc /am \neq ari$ (or $/^2am/^2ari$) who married firstly *tobe* the cousin of *tibitibi*, and secondly No. 17 $\ \bigcirc //kabbe\ II$ (or $//kabe\ II$) also a cousin of *abraham* by marriage. Finally there occupied the same hut No. $58 \ \bigcirc \neq abaitu$, another senile woman (said also to be /abbaisi), the sister (? cousin) of !kai/ko and $/am \neq ari$.

(See Plates 57 and 66)

also

Plates 5, thobaku; 29, 42 and 53 for malxas; 35-38 and 51 for abraham.

Hut 3 of |khanako

#khomani speaking.

No. $5 \circlearrowleft /khanako$ (or /ganaku), daughter of abraham, No. $51 \circlearrowleft /keri/keri$ and No. $7 \circlearrowleft marta$, young women, her daughters by a Bushman booi, No. $6 \circlearrowleft klein /khanako$ (or klein /ganaku) and No. $9 \backsim kuskai$ young girls, her daughters by an unnamed Hottentot and No. $8 \backsim lena$, her daughter by an unnamed European.

(See Plate 57)

also

Plates 2, 78 and 81 for klein | khanako; 33-35, 45 and 78 for | khanako; 69, 70 and 81 for marta; 71 for | keri | keri; 83 for kuskai.

Hut 4 of | | kabbe II

/?auni speaking (≠khomani).

No. 17 //kabbe II (or //kabe II) son of kulkake, stepfather by marriage of abraham, No. 18 /am \neq ari his wife, No. 19 witteman grown up stepson of /am \neq ari being the son of tobe (formerly husband of /am \neq ari) and tobe's first wife naikis, No. 20 !kwoi/kan grown son of /hokei, daughter of tobe and naikis, No. 21 mamas, grown up daughter of /gwa, daughter of tobe and /am \neq ari. Note: No. 19 is a second cousin of No. 22 |/am/|na and lived for periods in Hut 5.

(See Plate 58)

also

Plates 3, 4 and 49 for $/am \neq ari$; 7, 8 and 29 for /kwoi/kan; 6, 30, 35, 36 and 54 for witteman; 10, 35 and 36 for /kamku II.

Hut 5 of ||am||na

≠khomani speaking (/²auni).

No. 22 $3 \mid /am \mid /na$ (or $\mid /ga \mid /na$) son of tutai, a first cousin of abraham, No. 23 $9 \neq gauke$ his wife and the daughter of $\mid alo \odot pw\tilde{a} \mid II$, who is also a first cousin of abraham, No. 24 3 klein-ourooi II, No. 25 hokusa (hokusaa III or agusa), No. 26 $9 \mid kx^2 \mid oukoi$ and No. 27 $9 \mid klein \mid suxuu$ their four small children. No. 14 !heixa, first cousin of $\mid /am \mid /na$.

(See Plate 59)

also

40 and 47 \neq gauke and infants, and 30, 36 and 55 for //am//na. Hut 6 of //khaku

#khomani speaking.

No. 28 & //khaku (or //²aku) son of /goikam, first (or second) cousin of abraham; No. 29 \bigcirc haki his wife and a second cousin of abraham; No. 30 \bigcirc ou tsamas; sister of haki; No. 31 \bigcirc y!ka, and No. 32 !kweye, baby daughters of ou tsamas; No. 33 \bigcirc /ues; No. 34 \bigcirc mamakas and No. 35 \bigcirc !ka!kanu daughters of //khaku and haki; No. 36 //khaku III grandson of No. 28 through his first wife's daughter tatui II (or sebaku).

No. 36 sometimes lives in Hut 8 with |alo ⊙pwã II (brother of |/khaku) and ≠en (brother-in-law of |alo ⊙pwã II because they married sisters).

(See Plate 60)

also

Plates 36, 38 and 39 for //khaku and haki.

Hut 7 of !kuribe

≠khomani speaking (/²auni).

No. 37!kuribe son of \neq ubeiku I, cousin of abraham's first wife ou/khoro, step-uncle of No. 22 ||am||na, brother-in-law of ||kabbe II and thus connected by marriage with |am \neq ari's first husband tobe, to whom he is distantly but none the less directly related; No. 38 \circlearrowleft !kx\?un/i his wife, sister of No. 17 \circlearrowleft ||kabbe II and No. 52 ||kobe II; No. 39 \circlearrowleft !kamku II their grown-up daughter; No. 74 saap (nephew of No. 5 |khanako and cousin of her children |keri|keri and marta|) whom !kamku II married; No. 40 \circlearrowleft tamtam, No. 41 \circlearrowleft |gom|korop, No. 42 \circlearrowleft |kaap, No. 43 \circlearrowleft |ai|ai.

(See Plate 61)

also 3.

Hut 8 of ≠en or ≠kh∂∈n

≠khomani speaking.

No. $47 \neq en$ or $\neq kho \in n$) son of //kam!gake who had for grandmother kwisi, who was the step-mother of abraham; further $\neq en$ married into the same (korokake) family as did abraham's first or second cousin $/alo \oplus pw\tilde{a}$ II; No. $48 \circlearrowleft /kuruke$ wife of $\neq en$: No. $49 \circlearrowleft /k\tilde{a}wi$ II their grown-up grand-daughter through their son taki; No. $60 \circlearrowleft klein taki$ their grandson through the same son and No. $50 \circlearrowleft kata$, their grand-daughter through their son No. $77 \ ari$. (The wives of taki and ari were both daughters of //khaku by his first wife, so these children are also grandchildren of //khaku). No. $44 / alo \odot pw\tilde{a}$ II brother of //khaku and brother-in-law of /kuruke; No. 45 /kxube daughter of $/alo \odot pw\tilde{a}$ III and niece of $/alo \odot pw\tilde{a}$ III infant son of /kxube by unknown father.

(See Plates 62 and 63)

also

Plate 58 for /?en, 50 and 83 for /kawi).

Hut 9 of ≠ubeiku II

No. $16 \neq ubeiku\ II$ brother of !kuribe; No. $52 \circlearrowleft |/|kobe\ II|$ his present wife, sister of No. $17\ |/|kabbe\ II|$ and No. $38 \circlearrowleft !kx^2un/i$; No. $53 \circlearrowleft lukas$ grown man, son of No. 16 by his first wife $|a\tilde{u}/a\tilde{u}|$; No. $54 \circlearrowleft suxuu\ VI$ grown woman, daughter of No. 16 and No. 52; No. $59 \circlearrowleft tsap$ or $sasi\odot pw\tilde{u}$ infant son of No. 54 by unknown father. No. 76 $\circlearrowleft maarman$, grown grandson of No. 16 through his first wife's daughter $\neq odes$ and nephew of No. $47 \neq en$ through his brother !nansi; No. $55 \hookrightarrow lys$ a young girl and No. 56 !nansi (or !yansi II) a little boy the sister and brother of maarman respectively; No. $73 \circlearrowleft un\tilde{u}u$ a senile old man, brother of $\neq ubeiku$.

(See Plate 67)

also

52 for ≠ubeiku.

Hut 10 of uye

/namasa speaking.

No. 61 & uye, son of ou!kiep, and grandson of ou dourokorop; No. 62 \bigcirc /abes, his wife, a first cousin of abraham, being the daughter of his mother's sister krikis; No. 63 & jan, No. 64 \bigcirc khoitamas, No. 65 \bigcirc tsukoros II, No. 67 \bigcirc /an/|ani and No. 68 \bigcirc /ubukes, their grand-childern (ranging from puberty to infancy) through their daughter !kababis.

Hut 11 of |alakap

/namasa speaking.

No. 69 & |alakap (or |kalakab) son of uye; No. 70 \(\text{tatabesa} \) (or kapala) a \(\neq \tilde{e}ikusi \) (Vaalpens) woman; No. 71 \(\delta \) madekap (or matabap) and No. 72 \(\delta \) atap their small sons.

DOMESTIC RESPONSIBILITIES

From the hut distribution of the group we glean a considerable amount of information about the nature of the family ties, that impose responsibility upon a Bushman. A newly-married couple (such as No. 39!kamku II and No. 74 saap) live under the same roof as her father. A well-established marriage such as that of No. 1 malxas, or of |alakap| demands separate quarters. A marriage late in life (such as that of No. 17 ||kabbe II and No. 18 |am\neq ari) saddles the husband with not only his wife's children and grandchildren, but also those of her former husband by his second wife. Grandchildren seem customarily to be taken over by their grandparents once they have passed early infancy, as witness not only the huts of ||kabbe II, ||khaku, !kuribe,\neq en and \neq ubeiku but also the entire group of children in the hut of uye.

The patriarchal hospitality of the Bushman does not stop here. Single, grown-up, male cousins are at home in the dwellings of their male cousin and his wife; maternal brothers-in-law and their offspring dwell in the tent of the deceased wife's sister's husband; the aged abraham's home shelters not only his new wife and his children and stepchildren but the senile wife of his first cousin and the aged sister of $|am \neq ari|$, i.e. apparently anyone who was not cared for by others. Abraham was the acknowledged leader or headman of the whole group. He died in the Kalahari in May 1937.

These facts corroborate the love of children and affectionate respect for old age, which characterises the psychological outlook of these people. To the last *abraham* was attended by friends under a chosen tree; he was of great age and, apart from arteriosclerosis showed no manifestations of ill-health.

THE GENEALOGICAL TABLE

Linguistically the group is Bushman speaking /?auni and #khomani, save in the case of Huts 10 and 11, where the language is Hottentot although the individuals claim themselves Bushmen, but cannot define their tribe very closely. They are therefore dubbed /namasa for the

purpose of our table, the oldest remembered ancestors being ou dourokorop the grandfather of No. 61 δ uye. Another alien linguistic influence is doubtless represented by the $\neq \tilde{e}ikusi$ (Vaalpens) females who have married into the other "tribes" and whose language has not been studied.

Four linguistic groups are therefore involved and apparently still more intermarrying of exogamic groups. We could not determine absolutely whether there were several different exogamic groups in both the /2auni and the $\neq khomani$ "tribes" or whether a still further unknown "tribe" or "tribes" constituted the other exogamic units. Either may be the case and to avoid confusion the families where doubt occurred are separated off in our table.

The /2 auni (of Hut groups 5, 9 and 7) are traceable back to a male ancestor !noikje, his wife haitis and some intimate male relative of his, probably a brother or brother-in-law. In the same way the \neq khomani (of Hut groups 1, 2, 3 and 6) are traceable to a male ancestor !noben/kari, his unknown spouse and, with less certainty, to another close male relative sibiki and his wife sukuu I.

As set forth in the genealogical table the data appear definite; but, despite the time given to this portion of the investigation over four months of contact with the group, certain of the results must be accepted with some reserve. At first we imagined we had ten separate family groups; the further our genealogical investigations went the more closely interrelated we discovered the members of these groups to be. As Miss Bleek stated in a letter after her checking over our preliminary tables in Johannesburg:—" The only quite unrelated one is miki or koro (i.e. No. 2 |kweike). Her people call themselves $|/n \neq e|$ (home people) like my old friends in the Langeberg, not $\neq khomani$, but the language seems identical. She comes from a farm near the Orange River."

There are many reasons why an investigation of this sort is tedious and unsatisfactory. Firstly there is the variation in the names used, due to latitude and changeability of the clicks themselves (see Doke, 1937. p. 450). Secondly there is the frequent use of several names (Bushmen or Afrikaans or both) for the same individual (vide miki already cited); thirdly there is the frequent occurrence of the same name (e.g. suxuu) in several families or in several generations of the same family; fourthly came the necessity for most of my interrogation to be carried out at second hand through interpreters with elderly people, whose memories frequently proved defective and variable. Our seemingly inane enquiry caused much amusement to the Bushmen and involved them in much unwonted cogifation. While they recall the names of their parents,

brothers and sisters, Bushmen have little knowledge of the inter-relationships of the generation preceding their own, and carry no secure memory of these phenomena in the grand-parental generation. Marriage between cousins and between uncles and nieces is permissible; indeed, marriage between half-brother and half-sister is legitimate provided, in the words of one witness /khanako, they have not proceeded "from the same womb;" but such alliances are not encouraged and no living example thereof could be quoted by them.

The procedure followed in the final draft of the genealogical table was to place the families, as far as possible, in the tribal group to which they belonged. Thus the families appear under the name of their father and the parents' names occur twice in their appropriate places. In those instances where the paternity (or the tribal group of the father) was unknown, the simple expedient was followed of placing the children under the name of their mother.

The table was prepared not only to assist in this physical investigation but also to serve as a point of departure for future investigators. The members of the expedition were imbued with the desire to bring about the establishment of one or more Bushman Reserves in Southern Africa, where the remnants of this fascinating human group of Bush peoples might be preserved for generations to come. It was felt that under such happy future circumstances every scrap of information gathered together, however fragmentary, would be of ultimate value. We ourselves have been assisted by Miss Bleek's having encountered abraham, !kai/ko and the now dead tibitibi, tutai I and several other members of the families as they existed over twenty years ago and the living ones were re-identified by her and checked from her photographs. In the same way we hope that those, who may investigate these or the others with whom they mingle during coming years, may find assistance from our preliminary efforts.

The hut groupings compared with the genealogical table show that Huts 1, 2 and 3 (of malxas, abraham and /khanako respectively) form one closely-knit family group. The heads of Huts 4 and 8'//kabbe II and \neq en are first cousins; while \neq en and /alo \odot pw \tilde{a} II in Hut 8 are brothers-in-law. The majority of the occupants of Hut 4 however are cousins of //am//na the head of Hut 5, who also married the daughter of /alo \odot pw \tilde{a} II; hence these three huts form a closely-woven group also.

The house of abraham is directly related to those of his first (or second) cousins: //khaku of Hut 6 and /alo@pwa II in Hut 8; meantime, by his own marriage with haki, //khaku links himself with the occupants

of Hut 4 and his daughters marry the sons of the house of $\neq en$ the head of Hut 8. It is this latter cross-marriage which places doubt on whether the family groups on the left side of the $\neq khomani$ section of the genealogical table, i.e. those of $//kabbe\ II$ and $\neq en$, are genuinely $\neq khomani$ or belong to another exogamic group.

I have separated by a mark of interrogation also the Bush group into which /khanako first married. Booi married both a \neq khomani woman, i.e. /khanako, and an /²auni woman, i.e. /anabes. Therefore we are confronting here either two exogamic clans within the \neq khomani tribe or another unidentified tribal group altogether. That there are affinities between the left half of the \neq khomani table, which has also been indicated with a query, and this unidentified group, is signified by the use in both groups of the names ake, bake, gake and the like; just as the termination \odot ka or \odot pwã is almost presumptive evidence of \neq khomani and nu or ku of /²auni individuals. In further connection with names it may be noted that just as we might say "Jack's Jill" to separate her from "Harry's Jill," so the Bushman frequently prefixes the name of father, mother or husband before a name, e.g. //au/kwekawi or the kawi of //au/kwe.

Irrespective of the exactitude of tribal identification the fact remains that Huts 4, 6 and 7 are tied by close bonds. But the relationships between these and Huts 7 and 9 are almost equally intimate, for not only are !kuribe of Hut 7 and \neq ubeiku of Hut 9 brothers, but they have married the sisters of ||kabbe II of Hut 4, whose contacts have already been analysed; they are also the first cousins of abraham's first wife ou/khoro.

Finally there come Huts 10 and 11 called /namasa, an entity of their own but connected to the /?auni and $\neq khomani$ people by the marriage of uye with /abes. The lack of information from the women prevented us from learning more of the contacts between the $\neq \tilde{e}ikusi$ (Vaalpens) on the one hand, and the /namasa, $\neq khomani$ and /?auni on the other. Each of these groups has the validity of an exogamic unit and although there are some cases (cf. /anabes and $\neq odes$) where individuals appear to have broken the exogamic marriage rules they have been for the most part strictly observed.

A propos exogamy it is of interest that, when they discuss individual members of earlier generations, the Bushmen also find it difficult to say with certainty that this or that individual referred to is of a particular exogamic group. This confusion is doubtless contributed to by the criss-crossing, which occurs with each generation, and by the double or triple marriages of individuals into two or more exogamic groups. Further contributory factors are the living of cousins, grandchildren and other

relatives-by-marriage of various tribal groups in the same domestic environment as members of, or brothers and sisters in the same tribal group. Unless a Bushman happened to be interested in family relationships, and one can scarcely imagine, in the absence of landed property, what reasons he would have for being so interested, he would be bound to forget the lives and loves and exogamic position of his predecessors unless some unusual occurrences marked their existence.

From our records then we have represented here chiefly $\neq khomani$ Bushmen, and /?auni Bushmen with whom they principally intermarried. In addition to these are the families of $\neq gobake$, kulkake and koro!kake into which members of the $\neq khomani$ tribe married. There is thus at least one further unidentified exogamic group of Bushmen, the family of $\neq gobake$ in which /khanako married booi her first husband. This tribe could not have been /?auni; as booi either previously or subsequently to his sojourn with /khanako had married /anabes the daughter of $\neq ubeiku$ II.

The tribal affiliation of the family of kulkake with the $\neq khomani$ is, as we have seen, uncertain. One record made //kam/gake (who married kulkake's daughter) a brother of /kx'am @wa, who was also stated to be a brother (? by marriage) of //ani//oro. This /kx'am @ wa (by his wife //ãku) is also credited by some, as the father of No. 37 !kuribe and sara, the wife of amxa (or koos, not the koos of our group). It is quite probable that these two children were brought up by their uncle /kx'am @wa and that in reality his wife koorys was the sister of ||ani||oro. There is similarity and perhaps identity between the names of the wife of //kam/gake and the first wife of \(\neq ubeiku II.\) The point I am making is that there were cross-marriages between the /?auni and the family of kulkake as there were between both the /?auni and the \(\neq khomani\) with the family of ≠gobake. Equally there are ≠khomani cross-marriages of //khaku's daughters with the family of kulkake. It seems therefore obvious that if this people of similar sounding names were better known, they would be revealed as a fourth unidentified exogamic group. Linguistically, however, such third and fourth groups did not appear, although it was suggested from one informant that some individuals had married into the naron tribe.

Of lesser dimensions, but none the less patent, are the two further $\neq \tilde{e}ikusi$ (Vaalpens) and /namasa Bushman contributions to our group. The former seem to have a different Bush dialect but there was inadequate time to study it; the latter speak the nama dialect of the Hottentot tongue. The linguistic influence of Hottentot contacts is encountered not only in

the /namasa group but also elsewhere especially amongst the unidentified tribe and the /?auni tribe by the occurrence of names ending in p (for the male) and s (for the female). The linguistic influence of Afrikaans also is extensively revealed in the use of prefixes such as ou (old) and klein (small) to Bush or Hottentot names and the occurrence of actual or alternative Afrikaans names such as ari, witman, piet, marta, lena and the like—names which they have received as servants or have actually appropriated. Finally there is the single representative (!kweike) of the $|/n\neq e|$ tribe already referred to.

PERSONAL NAMES

Each person, even the youngest child had a name. These do not appear to have been given indiscriminately. Children sometimes bear the names of their parents. Instances of this sort are those of abraham, taki and \(\neq ubeiku II \) (\(\neq kobekuu II \)), !nansi and !heixa taking their father's names and klein |khanako and klein \(\neq gauke \) (or \(\neq gauke II \)) taking their mother's. We find also those named after grandparents; this occurs in the case of kulkake, hokusa, |alo\(\oldow pw\alpha, ari, \neq en \) and |khaku amongst males and !kamku II and |leamme amongst females. The more regular procedure, however, seems to be that of a nephew's receiving the name of his uncle, e.g. tutai II and |alo\(\oldow pw\alpha II \), his great-uncle, e.g. klein-ourooi II and teges II, his great-great-uncle, e.g. hokusa III, or his great-great-uncle's cousin (probably regarded as an uncle) e.g. tutai III, or of a niece receiving the name of her aunt, e.g. !kxube, suxuu II and suxuu V, her great-aunt, e.g. |k\(\alpha vi II \), suxuu IV, kwisi II and ||kobe II, or her great-great-aunt, e.g. auros II.

There are a few instances where the same name, e.g. tutai and //khaku (or //²aku) is given to both males and females, but this is very rare; there are also various names such as /kabu, //kabe, /khobe, and /kaube the former two of males, the latter two of females, which vary from one another only in the vowels. With the variations in enunciation and value that occur even in the same individual's clicks and other sounds, it is remarkable that there is so much agreement between different witnesses relative to both sex and name in the genealogy.

From the foregoing it may be taken that the names of a particular group of children, especially if the family is fairly large, is an epitome of their family's past marriage history. When therefore we find a woman //kobe marrying a man $\neq kobekuu$ (or $\neq ubeiku$), whose own mother is called //kabe, we can be tolerably sure he is marrying one of his cousins even if we could not prove it. The occurrence of a particular name is

presumptive evidence that an uncle (or aunt as the case may be) in an exogamic group bore the same name.

How ancient some of these names must be is indicated by the fact that identical, or almost similar ones occur about 1000 miles further north in Angola; thus Miss Bleek (1928) records in the eastern region there the names !nabe, ||khaku, |kwaku and |kako for men and in the western part the names |kaku, |gaku and ||kabe for women. From these facts it can scarcely be doubted that these Bushman personal names are of great antiquity and have been handed down in the fashions disclosed from remote times.

INBREEDING

Secondly with respect to inbreeding, it is clear from our table alone that these several groups of people have been mingling with one another by cross-marriage for the last century. They have probably been inbreeding in this way from the remotest times. An interesting occurrence during my enquiries concerning intermarriage with /khanako corroborates this opinion. I drew two circles in the sand alongside one another. To explain the system to me she rubbed out the circles and drew a succession of parallel lines to represent sand dunes and across one of the "dune valleys" or straats, as they are known, two lines at an interval from one another to represent two different lines of Bushman huts or intermarrying families. I gathered from this that, where possible two neighbouring Bushmen tribes occupied different extremities of the same dune valley system and kept in vital contact with one another although hunting over different territory. The great length of time over which these /?auni, ≠khomani and other tribal groups have kept living contact with one another in this fashion can be inferred from this genealogical table.

Inbreeding, then, is only partially counteracted by the exogamic custom in adjacent groups. Specific examples of the interweaving of relationships between the two groups referred to are as follows:—

1. $/|au|kwe|k\tilde{a}wi$, mother of /|am|/na, is the grand-daughter of $\partial kulkake$ and $\nabla kwisi$ who are said to be cousins of /nurike/xam.

By this marriage ||am||/na secures as mother-in-law $\neq khai$, who is the sister of his mother's sister-in-law, |kuruke| (who married $\neq en$).

Meantime /|am|/na's half-sister suxuu V marries jankajasi the son of /|khaku (who is a brother of his father-in-law $/alo \odot pw\tilde{a}$ II) and his wife's $(\neq pauke's)$ cousin.

Further //khaku's second wife haki is a cousin of //am//na, being the daughter of tobe, the brother of his father tutai.

- 2. abraham's (!gurice's) step-brother by marriage kulkake II married ou!kamku, whose aunt was //kobe I and who was abraham's cousin and kulkake's step-cousin by marriage. The two daughters (//kobe and !kx'un/i) of kulkake and ou!kamku married abraham's cousins-in-law (\neq ubeiku and !kuribe). The fact that their mother's name was //kobe also indicates that these two girls are their husband's first or second cousins. Recently the daughter, (!kamku II) of !kuribe and !kx'un/i has married saap the son of her father's (!kuribe's) cousin sara (or |abbasi), the sister of abraham's first wife ou/khoro.
- 3. abraham's step-mother kwisi is the great-aunt of thobaku his own second wife.

There is no reason to assume that we exhausted the facts or that this interweaving process is of recent origin, but every reason to believe that inbreeding has characterised these groups from the earliest times. The emigrant relative becomes a stranger and her children potential spouses. Although uve's wife labes is a first cousin of abraham, they and their familes were treated, on their arrival at the camp, with all the formality of complete strangers outside abraham's group. They lived at a distance from the rest; courtesy visits took place between the two groups during the day-time; at night-time the two groups were at first separated around distinct and separate fires in the vicinity of the dancing-ring. What nocturnal formalities took place before we arrived at the dancing-ring we do not know, but those occurring on our evening visit to the camp have been fully described by Prof. C. M. Doke (1937 pp. 470-1) and are mentioned here to indicate how close relatives (e.g. /abes) are, none the less, identified as strangers. Her offspring would marry still more freely, than those already discussed, with their kindred of the stranger group, from which /abes originally was derived. The exogamic practice of the Bushmen can operate only partially as a restricter of inbreeding.

In a short-memoried community, any factor predisposing towards confusion of the memory tends towards inbreeding. Such factors are laxity in marital arrangements and repeated marriage. In respect of marital arrangements there is nothing to indicate that ties are binding. While we were in camp (vide also p. 470) the marriage of //khaku and haki

¹ The "tribal" organisation of the few remaining Bushmen in the Union of South Africa—their members probably do not exceed 200—is rapidly disintegrating. They no longer practise the pubertal rituals of either boys and girls. In Miss Bleek's opinion it is doubtful if the Bushmen have any

was celebrated and had been gone through a fortnight before, although they have two children /ues and !ka!kanu (twelve and five years old respectively); this may have been due simply to the fact that the institution of the camp provided opportunity for doing things according to their customs, which their previous living conditions had prevented them from exercising. !heixa, who was in camp, had deserted his wife lys; /khanako had borne children to three different fathers (/keri/keri and marta by a Bushman; klein /khanako and kuskai by a Hottentot and lena by a European). She made no effort to conceal the facts from us, her associates or the children themselves. "Illegitimate" children are accepted on all equality with any subsequent or previous "legitimate" offspring, both by parents, grandparents and other relatives. Similar irregularities marked the earlier careers of tutai, tobe, \(\neq xaue, \neq odes, \text{ etc.} \)

It seems usual that the same couple remain together for a shorter or longer time according to temperament. This does not prevent life-long attachments as for example abraham and ou/khoro, uye and /abes, etc.; if either partner dies, remarriage is usual. Thus both abraham and thobaku were married previously; haki is //khaku's second wife and there are numerous like instances in the table. We suspected many more because those, which came to light, emerged after considerable reticence. This repreated marriage, regular as it may be from the point of view of custom in comparison with the laxities of association referred to above, is a powerful factor in confusing the memory. We found plenty of evidence of repeated marriage in the present families and their progenitors and the utmost confusion consequent as to precision of the inter-relationships of those living at present. From the data secured we had the impression that, were the data complete, every individual of the same generation in the two groups would have been discovered to be related to his fellow several times over owing to the profound intermixture. Surprisingly enough the women were even poorer informants than the men. Had we been able to trace further the ancestries of $|am \neq ari|$, !kuruke, thobaku, etc. we would probably have elicited a still more surprising complexity of inter-relationship.

That inaccuracies exist in the table is unquestionable! Informants varied their information from time to time—probably for the above-cited

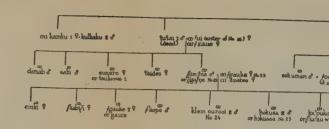
marriage ceremonial other than that of capture, or pretended capture—so that the ceremony of dancing the bride and bridegroom individually to the dancing ring, around it and from it to their prepared hut followed by a feast (as practised by them today) may be borrowed from Hottentots or Bastards in their vicinity. In the recent marriage of !kamku II \mathcal{Q} to saap \mathcal{C} during their stay at Johannesburg they also repeated the ceremony on several occasions, so that it does not appear to have any ritual significance of great import.

reasons; but the inaccuracies are chiefly those of omission as the result of lacking information. We can only make the assumption that, however great the degree of inter-relationship the table reveals, further data would have served merely to increase the certainty and detail of inter-relationship and inbreeding. We thus achieved the one main purpose of the enquiry namely to discover whether or not we were examining a homogeneous group of Bushmen speaking the Bush language. If by the term "homogeneous" we mean a group of people that have been inter-breeding freely for generations, so that the characters encountered in any one random section of the group are just as likely to be encountered in any other section, then this collection of seventy-seven Bushmen constitute such a homogeneous group. As far as we have been able to determine they are the purest group of Bushmen now extant in the Union of South Africa.

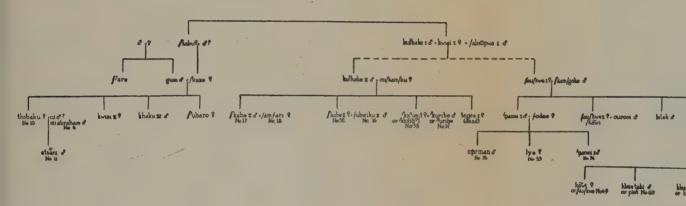
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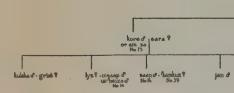
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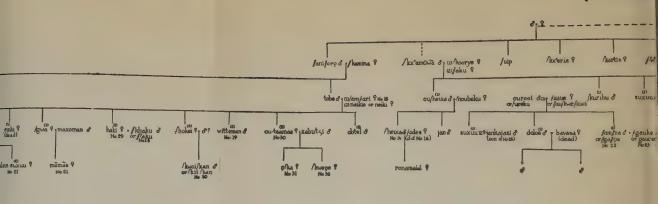


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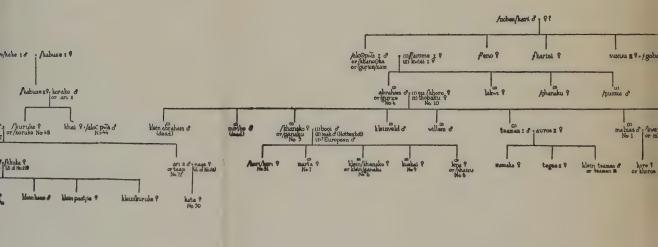




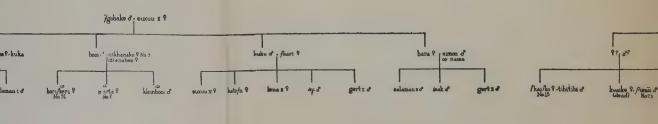
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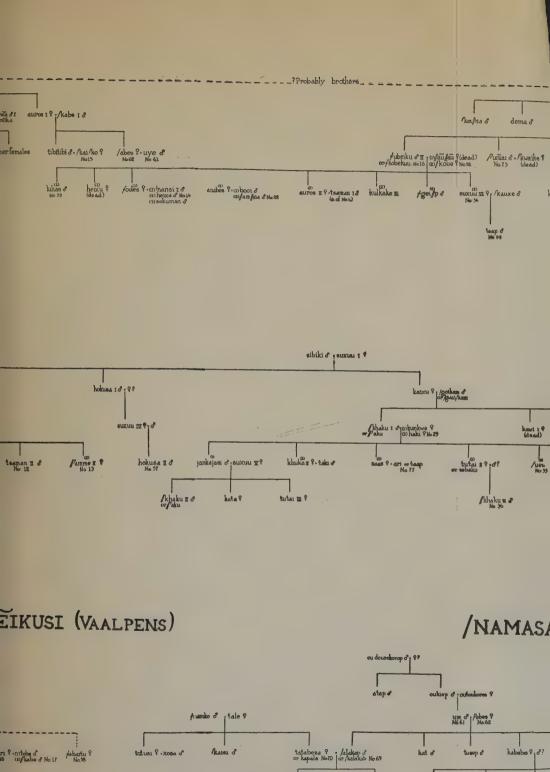


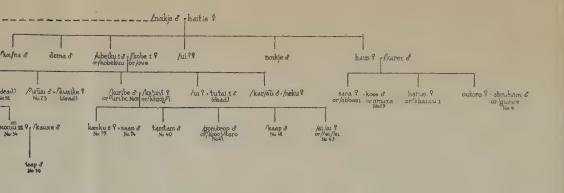
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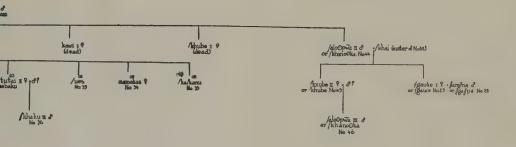


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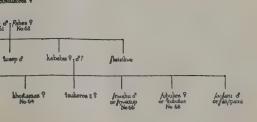








/NAMASA



THE PHYSICAL CHARACTERS OF THE /2AUNI-≠KHOMANI BUSHMEN

By RAYMOND A. DART

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THE PHYSICAL CHARACTERS OF THE |?AUNI-\(\neq KHOMANI\) BUSHMEN

1. INTRODUCTION

In the opening chapter of "The Bantu-speaking tribes of South Africa," I stated that, from analyses of Bush and Bantu crania, J. H. Gear "concluded that the fundamental type of skull, common to all Bush peoples of South Africa, is the chamaepentagonoid. In keeping with its baby-like form, its dolichocephaly and chamaepentagonoidy the skull has a small endocranial capacity, i.e. it is "microcephalic." I further remarked "Previously no very clear idea existed as to what was and what was not a Bush skull. Even today most diverse and contradictory statements are current in the literature. Some writers affirm that the Bushmen and Pygmies are Negroes; others separate all three from one another and proceed even further to manufacture Hottentot, Strandlooper, and Korana, and other branches of the African human stock; alternatively, suggestions have been put forward that Hottentots are hybrids between the Bush and the Bantu.

"Australoid and Boskopoid types do crop up in the living population, especially amongst the Bush peoples in the south western ethnical territory of Africa. They may prove one day to be more prevalent than has been recognised hitherto; but they are so few numerically and so sporadic in occurrence as to constitute anthropological curiosities. They are atavistic links with Africa's past, heirlooms of antiquity preserved in the southern recess of the continent. They do not belong to the Brown or Negro races, and they do not represent the fundamental type to which the greater number of individuals in all branches of the Bush family belong" (1937).

For clarity's sake I anticipate the main conclusion to which our study of these Bushmen led us, by stating that the Australoid type appeared in only two of their number but that the Boskop type, far from being sporadic, constituted so considerable an element that this group of Bushmen would be better described as comprising a Bush-Boskop matrix in which are impressed extraneous elements chiefly from the Brown (or Mediterranean), Armenoid and Mongolian races of mankind together with a few from the Negro race.

Before the evidence is brought forward to prove these points it is important to survey in brief retrospect the work in anthropology that enabled us to draw these conclusions. It had been recognised from early colonial days that strong cultural divergences separated the hunting Bushman from the pastoral Hottentot. Finally Fritsch (1872) carried out detailed physical investigations on fifteen individuals as follows:—two Hottentot females from Bloemfontein and two males from the Cape Colony, two Koranas and one Korana Bushman from Boskof, one Hottentot from "the Cape of Good Hope," two Bushmen (one male and one female) from Colesberg, two Bushmen (one male and one female) from Clanwilliam, one Bushman from Shoshong, two Bushmen (both males) "with Hottentot blood," one coming from Colesberg and the other from an unnamed spot in the Cape Colony.

In this mixed "bag" of material collected over so large a territory Fritsch encountered several cranial types; indeed he anticipated in a remarkable way and with very accurate descriptions all three of the main types of skull: Bush, Boskop and Australoid, that we recognise today.

He points out the peculiar character of the dolichocephaly in the skulls he called "Hottentot" which remind one of the pathological entity trigonocephalus. It is associated with platycephaly and a prognathism less than that of the Bantu. The skull is long, pentagonoidal and has its greatest width behind in the region of the tubera parietalia. His exact descriptions, the pictures of the skulls and their measurements demonstrate that these features, he regarded as "Hottentot," are those we have since learnt to identify with the fossil Boskop human type.

Fritsch in this way anticipated Keith's descriptive work on the Matjes River Boskop cranial material, recovered by Dreyer, relative to trigonocephaly and he also anticipated in his Korana Hottentots, with their post-coronally transversely-grooved skulls and fairly obvious eyebrow ridges coupled with strong prognathism, a third human cranial type, which to him was very confusing, but has been identified by Broom (1923), Allen (1926) and Drennan (1929) as Australoid, on account simply of the exaggerated eyebrow region.

The thoroughness of this study, performed over half a century ago, is impressive; its significance has been embellished by subsequent discovery and enhanced sources of material. The only regrettable feature is that on his slender material Fritsch jumped, past his correct conclusion that he had found at least one and possibly two hitherto unrecognised races of mankind, to the unhappy deduction that the widely represented long-headed, pentagonoidal, trigonocephalic cranial type was diagnostic of a "Hottentot" as distinct from a "Bushman." By this terminological misfortune his work led to various futile attempts to separate physically two people who are of dissimilar culture but, as far as has been determined to-day, have an identical physical constitution.

The impracticability of separating Bushmen and Hottentots physically was expressed by Peringuey (1911) in the following words:—

"It is well-nigh impossible to distinguish now from outer appearance a so-called Colonial Bushman from a native of Hottentot origin. Personally I have given up the attempt. Von Luschan admits also that during his visit in South Africa he was greatly puzzled to decide if a given individual was a Bushman or a Hottentot."

Later he says

"Nor am I so sure that the Early Colonists did discriminate between the two from a differentiation in physical appearance only. Those who had herds of cattle, and were not too small, were Hottentots; the others, who lived mostly by the chase or kept no cattle or sheep, and were small, were Boschiesmen."

Meantime, Shrubsall (1906-09), working once more with skulls, had been striving to isolate Hottentots, Bushmen, Strandloopers and Kaffirs from one another by means of mathematical and indicial values. He recognised that "Hottentots" were hybrids but, unaware of the extent to which the Bantu were themselves hybridised and regarding them as a relatively pure racial stock, he arrived at the conclusion that his "Hottentots" were Bush-Negro hybrids.

The clue to this enigma was forthcoming a decade later (Haughton, 1917) by the discovery of a fossilised skull at Boskop in the Transvaal; but a considerable time and a succession of discoveries has been essential to supply necessary links in the chain of evidence, which would prove the underlying fallacy in this earlier point of view. It was not until almost another decade had elapsed (Dart, 1923) that the same Boskop cranial type was discovered underlying Bush remains at a depth of eighteen feet in the Zitzikama caves excavated by Mr. Fitzsimons. Subsequently an analysis of the superjacent human crania by G. D. Laing and H. S. Gear (1929) proved them not to be purely Bush but a hybrid Bush-Boskop population. Meantime H. S. Gear (1926) described a Boskop individual from an excavation beyond the Zambesi River as far north as Kalomo in Northen Rhodesia, and Professor M. R. Drennan (1925) had supplied the science with an unexpected surprise by discovering the same largeheaded, large-boned and non-Bush, non-Negro, Boskop type in a "Hottentot" cadaver dissected in the University of Cape Town. The discovery of variant and divergently named, but none the less Boskop types at Fish Hoek (Keith 1931), Matjes River (Keith 1934) and finally at Asselar on the southern confines of the Sahara Desert (Boule 1932) has afforded evidence quite recently of a continent-wide distribution of this ancient, fossilised and primitive type of mankind.

These discoveries over the last twenty years have made it easy to interpret nowadays such crania, as Shrubsall naturally found extremely confusing, like the "Strandlooper" from Blaauwberg district, which was of great antiquity and had "a prominent nose and face with a greater lengthening-out of the occiput, in some respects recalling the 'river-bed' type of early European skulls," and disconcerting surprises in South Africa such as were paradoxical to him namely that "the skulls with the greatest presumptive antiquity are the largest. . . If the Bushmen are the unmixed descendants of the cave-dwellers, there has been a distinct degeneration in the size of the brain " (Shrubsall 1911). We know now that these big-headed, big-brained types, whether they are branded as Strandloopers, Hottentots, or Bushmen are the fossilised or living descendants of one and the same physical type, which once occupied the whole of Africa south of the Sahara and which preceded the Bush physical type in the caves and countryside of Southern Africa. The Boskop type did not produce the Bush type, unless the latter arose as a sport from that type, because they hybridise like two, genetically distinct, human types. To continue to call the Boskop type "Hottentot," now that we know the pre-Bushman antiquity and the continent-wide distribution of the Boskop type would be to give to the cultural term "Hottentot" a significance in physical anthropology it was never intended to convey culturally.

The Boskop type could not possibly have been responsible for Hottentot culture. Nobody would have the presumption to suggest that Hottentot, pastoral, "neolithic" culture preceded Bush Late Stone Age, hunting culture; but the Boskop (the so-called "Hottentot" physical type) was so ancient that he preceded the Bush type and his culture was almost certainly Middle Stone Age in type. Even if these nomenclatural difficulties could be surmounted in the effort to retain for anatomical science Fritsch's, century-old term taken from layman's slang, we would be no nearer to our goal of describing accurately thereby the physical make-up of our culturally-distinct Hottentot and Bushman tribes. Physically, as we might expect from the anthropological story recounted, Hottentots, Strandloopers and the like cannot be distinguished from Bushmen; both are equally Bush-Boskop hybrids. Amidst both of them small-headed Bush types and large-headed Boskop types can be found in a relatively pure state, as Fritsch found them, but neither type is more characteristic of the one cultural group than of the other.

This was the whole import of the extremely valuable comparative study of seventy-four Hottentots and fifteen Bushmen by L. Schultze (1928). It led him after more than twenty years of study to the conclusion that the common possession of the following characteristics:—brown-

yellow skin-colour; narrow-spiralled, black, sparsely-distributed hair; macronymphia or apron-formation of the female genitalia; steatopygia; narrow palpebral fissure with strong development of the upper lid fold; broad flat nasal soft-parts together with the following skeletal characteristics:—widely separated orbits; flat nasal-saddle; low face and low skull "separates in the same fashion Hottentots as well as Bushmen so clearly from all other races of humanity that both, separated off from them as a unity, should be grouped together under a particular name." He suggested a common racial name for the Hottentots and Bushmen, the word Koisan the first half of the word being derived from the Hottentots' own descriptive term for themselves, the second half from their word for the Bushmen.

Our investigation was therefore directed not towards the archaic and sterile issue of separating "Hottentots" from "Bushmen" but towards discovering the racial constitution of this Bushmen group, isolating there the Bush physical type and, where present, all other known living types—such as the Negro, the Brown (or Mediterranean), the Armenoid and the Mongolian types—and, by a process of exclusion, arriving at the pre-Bush or Boskop physical type. From the mélange of living individuals the face and form of the pre-Bush population of Southern Africa thus emerged gradually as it were from a palimpsest.

2. CEPHALIC FORM

The point of departure in our analysis of the group was cephalic form following the system of Sergi as modified by Frassetto (1909-18). Previous cranial investigations had shown two types of pentagonoid skull in the pre-Negro population of South Africa:—the short pentagonoid Bush form of skull (roughly 170-180 mm. length and 135-140 mm. broad) and the long pentagonoid Boskop form of skull (roughly 190-200 mm. or more long and 145-150 mm. or more broad). Both types contrast strongly with the ovoid Negro skull.

In this group of Bushman heads we found the two pentagonoid types of head-form. There is no difficulty in diagnosing extreme types; the personal factor arises only when one is confronted by intermediate types. Our task was rendered relatively simple because practically all the heads were pentagonoid in form (vide Table 3). The majority (over 60 per cent) are acutely pentagonoid; the remainder are obtusely pentagonoid; only two were so obtuse as to be indistinguishable from an ovoid.

Frontal bossing was slight in one (1.3%), definite in six (or 7.8%), well marked in sixty-four (83.1%) and greatly accentuated in six (or

7.8%). Similarly parietal bossing was apparent in eleven (or 14.3%), well marked in fifty-nine (or 76.6%) and greatly accentuated in seven (or 9.1%).

Relative to the supra-orbital margins there were nineteen (or 24.6%) where they were perfectly smooth; ten (or 12.9%) where they presented the very slightest elevation; eleven (or 14.2%) where they were slight but palpable; twenty-nine (or 37.6%) where they were visible as ridges and eight (or 10.7%) where they were marked. Of these last eight, two were so exaggerated viz:—/abes and her son /alakap that they could be termed Australoid.

We encountered trigonocephaly so frequently in this group of Bushmen, that we hesitated to trust our observational capacity, contenting ourselves, while diagnosing head-form, with a simultaneous note concerning the presence of a broad frontal region (br) or the presence of obvious (T) or slight (t) trigonocephaly or the presence of obvious (M) or slight (m) metopic ridging, as is set forth in our table of non-metrical characters.

Ten of the seventy-seven (or 13.2%) have broader foreheads than the majority; twenty-three out of seventy-seven (or 31.2%) individuals with a more or less well-marked trigonocephaly combined (in six out of the twenty-three) with more or less metopism. It is very rare in the "pure" Bush group and most frequent in the "pure" Boskop and hybridised forms. In four cases the trigonocephaly is accompanied by an elevated metopic ridge. In one further Bush child metopism occurs without any clear trigonocephaly.

On the basis of such inspectional or non-metrical information in the head, Table 1 has been drawn up. From this table we get the metrical result that Bush features predominate in forty-seven out of sevety-seven (or 62.5%) of the total group, Boskop features predominate in the remaining thirty (or 37.5%). In this table I have placed each individual, subdividing each group into the three categories of head-form exhibited by them, namely pentagonoides acutus, pentagonoides obtuses and ovoides. For further reference the notes whether the individual displayed a broad forehead (br) and an obvious or slight degree of trigonocephaly (T or t) or of metopic ridging (M or m) have been included and also (by means of an asterisk) the incidence of brachycephaly or near brachycephaly.

SEE TABLE 1

From this table it is apparent that, independently from any grouping given by metrical characters, the vast majority of the individuals of each

group can be separated into two pentagonoidal categories, acute and obtuse respectively. The acute pentagonoidal form predominates over the obtuse and ovoidal form and accounts for nearly two-thirds of the heads independently of whether they veer towards the Boskop or the Bush category. Hence the fundamental cranial type, whether Bush or Boskop, is pentagonoides acutus. But the Bush pentagonoides acutus is very distinct in its length and breadth and their relationship (dolichocephaly verging on mesaticephaly) from the Boskop pentagonoides acutus whose length is so great that, despite the increased breadth, the head is definitely dolichocephalic and may even be ultradolichocephalic in type. The diagnosis of pentagonoid headform in South Africa is therefore incomplete unless it be accompanied by information as to whether the pentagonoidy falls into the short Bush or into the long Boskop category.

Finding then that, by a simple recording of non-metrical facts, our homogeneous group resolved itself into two main racial components in terms of head form and size, it became important to give mathematical expression to these facts. For this purpose we plotted the absolute length, width and height of the heads for each individual determining the averages for each age group in the children and adolescents and for the adults as a whole.

SEE HISTOGRAM 1

Using these averages as dividing lines (vide Histogram 1) each individual was labelled in respect of these three cranial factors according as each fell above or below the average. Those with three large factors namely a great length, width and height were grouped as Boskop; those with three small factors as Bush; those with two large and one small factor Boskop-Bush and those with one large and two small factors Bush-Boskop.

Classified by such metrical criteria the individuals are re-grouped as shown in the following table (Table 2) examination of which shows that twenty-seven individuals have now altered their classificatory position as compared with the previous table (Table 1). These alterations chiefly affect children and the intermediate cephalic types, where classification by non-metrical methods provides an appreciable margin of personal error. This table has been drawn up for the dual purpose of correlating cephalic type with facial type (as will be explained later) but each individual can be traced by number in the cephalic groups.

SEE TABLE 2

How closely the figures for each of the four groups correspond whichever method is adopted appears from a comparison of the end results in both:

	Boskop	Boskop-Bush	Bush-Boskop	Bush.
Inspection Method	11 .	19	18	25
Metrical Method	17	18	24	18

It may be thought that such a metrical classification, despite the procedure adopted is arbitrary in assuming the presence of two types but analysis of Histogram 1 will demonstrate its justifiability. Whether we consider the length, width or height of the head the individuals in each of the age-groups plotted in the histograms, fall into at least two and, with increasing age, more than two groups. Further, if selected individuals are compared the correlation of large factors with large factors and of small factors with small factors is so regular that nothing but racial divergence could account for the degree of separation between such adults as No. 44 $\partial /alo \odot pwa\ II$ and No. 77 $\partial /ari\ II$ on the one hand and No. 7 $\wp /ari\ II$ and No. 21 $\wp /ari\ II$ on the one hand and No. 7 $\wp /ari\ II$ and No. 21 $\wp /ari\ II$ on the one hand and No. 7 $\wp /ari\ II$ and No. 21 $\wp /ari\ II$ on the one hand and No. 7 $\wp /ari\ II$ and No. 21 $\wp /ari\ II$ on the one hand and No. 7 $\wp /ari\ II$ and No. 21 $\wp /ari\ II$ on the one hand and No. 7 $\wp /ari\ II$ and No. 21 $\wp /ari\ II$ on the one hand and No. 7 $\wp /ari\ II$ and No. 21 $\wp /ari\ II$ on the one hand and No. 7 $\wp /ari\ II$ and No. 21 $\wp /ari\ II$ on the one hand and No. 7 $\wp /ari\ II$ and No. 21 $\wp /ari\ II$ and No. 21 $\wp /ari\ II$ on the comparative point of view in Plates 73 and 74; see also Plates 85-92 inclusive.

For comparison with the head-lengths of ari (202.5 mm.) and |alo pwa II (199.0 mm.) we may cite the following head-lengths of Boskopoid skulls:—

Boskop 205 mm., Zitzikama 210 mm., Fish Hoek 202 mm., Matjes River No. 1. 193 mm., and Matjes River No. 5. 201 mm.

There are therefore sound reasons for deeming the average adult headlength (185.5 mm.) of the group as corresponding fairly closely with the dividing line between genuine Boskop and Bush types in respect of headlength and the same may reasonably be claimed for the average adult head-width (141.3 mm.), and auriculo-vertical heights (indirect 119.9 and direct 142.1).

To summarise as graphically as possible the difference between the Boskop and Bush types ranges and averages were worked out not only for the adults as a whole and for the adult males and the adult females, but also for a group of ten pronouncedly Boskop types (the males No. $16 \neq ubeikuen$, No. 17 / kabbe II, No. 37 / kuribe, No. 44 / aloopwa II, No. $47 \neq II$,

No. 53 lukas, No. 73 /unūu, No. 74 saap, No. 76 maarman, and No. 77 ari II) and for ten pronouncedly Bush types (the females No. 2 !kweike, No. 5 /khanako, No. 7 marta, No. 10 thobaku, No. 18 /am=ari, No. 23 = gauke, No. 45 !kxube, No. 49 /kawi II, No. 51 /keri/keri and No. 62 /abes. These ranges and averages given in our table of measurements serve to show that, in general, the differences between the Boskop and Bush types are greater than those between the males and females and further that the divergence between the two racial types is of such a nature as not to be explicable in the terms of sex alone. From them we learn that the average Boskop head (193.2 x 147.9 x 147.1) is far more capacious than the average Bush head (178.5 x 137.2 x 138.6).

Schebesta and Lebzelter (1933) found that the average length of the Pygmy head was 180 mm. for males and 175 mm. for females and that the average breadth was 143 mm. for males and 139 mm. for females. The average length in our Bushman group is 190.2 mm, for males and 181.0 mm. for females, and the average width is 144,9 mm. for males and 138.3 mm. for females. The average head length is 193.2 mm. for the ten Boskop males and 178.5 mm, for the ten Bush females; the average head width is 147.9 mm. for these Boskop males and 137.2 for these Bush females. These measurements show that there is more agreement between Pygmy and pure Bush cephalic measurements than between Pygmy and Boskop measurements; but that the long-headed, Boskop type is present amongst Pygmies is shown by the occurrence of twentyseven in a group of five hundred and eighty-four Pygmies (i.e. 4.6%) whose cephalic length was 190 mm, or more. In the same way in their group of Bantu women Orford and Wells (1936) found a group (31.7%) of long-headed individuals, which they interpreted as being essentially of Boskop type and thus contrasting with both the Bush and the Negro type.

Relative to the distribution of this long-headed, Boskop type amongst the Southern Bantu, statistics gathered by Dr. A. Galloway show that eighteen (or 25.6%) occurred in a group of seventy living Ovambo and that the distribution in skulls was five in forty-nine Ovambo, sixteen in forty-eight Zulu and thirteen in fifty-one Sotho or, clumping them together thirty-four (or 22.9%) in one hundred and forty-eight Southern Bantu. The larger percentage found in the living is doubtless due to the relatively larger number of people who would give a measurement of 190 mm. and over when the soft tissues are still in position.

A word of explanation should be given of the two series of auriculovertical measurements recorded in our table of measurements. It was estimated in the field by taking the difference (indirect method) between the stature and the auricular (stature) height measured to the centre of the auditory meatus. The error involved through individuals' movements during examination gave such divergent results, that we checked it up by means of a head-spanner on as many subjects as possible in Johannesburg. Averaging both sets of results we found that over the whole group, the head-spanner (direct method) measurements were 2.3 cm. greater than the indirect ones. As this factor had to be added to all those not available for direct measurement viz:—Nos. 4, 14, 30, 32, 34, 35, 43, 58, 59, 67, 75 and 77 their particular head-height figures as given in the histogram are open to modification. Both series of measurements, however, are thus included in our records and their divergence in no wise affects the deductions from the cephalic facts concerning the group as a whole.

We have seen from this study that by either non-metrical or by metrical means, a homogeneous group of Bushmen heads can be divided into at least two heterogeneous racial groups and that this racial heterogeneity is traceable from earliest infancy to extreme old age. Further it is genetically significant that amongst the seventy-seven individuals seventeen (or 22.1%) are of Boskop, eighteen (or 23.4%) are Bush and forty-two (or 54.5%) are of intermediate (Boskop-Bush and Bush-Boskop) character. From the hereditary point of view Bush and Boskop cephalic features do intermingle and they breed out in accordance with the law of averages.

3. FACIAL CONSTITUTION

In ninety-eight Bantu women Orford and Wells (1936) found only 48.9% had Negro faces, while 32.7% were Bush and 15.3% were Brown (Mediterranean); the remainder were 1.0% Mongoloid and 2.1% Armenoid. In an analysis of nine hundred and seventy-seven Southern Bantu, chiefly males (by face masks and on the living) by Wells and de Saxe (Dart 1937) it was found that 51.3% had Negro, 25.0% Bush, 22.3% "Caucasoid" (chiefly Brown race) and 1.5% Mongoloid features. Hence the correspondence in Bantu males and females is very close and the two series of observations corroborate one another relative to the composite racial constitution of the Bantu. The suggestion that racial types alien to the Negro are present in the Bantu is not new; but these are the first occasions in which the distribution of such types has been investigated in such a way as to replace well-founded, yet none the less empirical presumption with mathematical facts.

Hybridisation has been claimed not only for the Bantu but also for the Bush peoples. Thus Peringuey (loc. cit) says "Von Luschan is of the opinion that the Hottentot is a cross between a Hamitic race and the Bushman." To account for the Mongolian features—recognised so fa back in time and so generally prevalent in certain of the Eastern Province Bush folk, that the early colonists called them "Snese Hottentoten"—Peringuey goes even further than Von Luschan and, drawing attention to "the busts of the Hyksos kings (the types of which exhibit essentiall Mongolian features" in Egypt), he says "that the Bush-Hottentot race should have resulted from this Mongolian invasion may not be impossible ethnically."

It has not escaped the attention of other observers also, that nor African elements go to form the modern Bushman. Speaking of the Angola Bushmen, Miss Bleek (1927-29) points out that the features var some approaching the southern Bushmen, others darker, have Kaff traits, others again have long narrow features, aquiline noses and almo Semitic features, and she expressed the opinion that there must have bee some small admixture with some Semitic fair or yellow race in bygon days.

I have frequently drawn attention to the racial admixture exhibite in the faces of South African races and in our Kalahari work we strove determine how pure racially our Bush group was; or alternatively what extent they, in common with the Bantu, had been effected by rac other than the indigences of Southern Africa. For this reason we we not satisfied with a "spot diagnosis" of facial type in the field, but to face masks of nearly all the adults and some of the children in the grou i.e. forty-four in all. These afforded the opportunity subsequently Johannesburg to compare these face masks directly with our consideral series (over two hundred) of European, Bantu and Bush facial masks the Anatomy Department, and to consult with Mr. L. H. Wells and other so as to correlate our field diagnoses with their earlier work. The comparisons, made in consultative conjunction and aided by the numero photographs taken of individuals and groups, have rendered our diagno: of facial type as free from personal bias as possible; the pictures a masks represent, moreover, a material which, if wrongly interpret to-day, is accessible for future modification or correction of opinion.

We found the faces of the Bushmen to be racially complex a decided that the best means of giving expression to that complex was indicate it by symbols:—B=Bush, Bo=Boskop, N=Negro, A=Arn noid, M=Mediterranean (or Brown or Hamitic), Mo=Mongolian, At Australoid. These symbols, serially arranged, depict the order dominance of racial characteristics presented by the faces. Thus

facial formula of No. 1 & malkas (vide Plates 57, 91 etc.) i.e. B.Mo.M. indicates a face which is primarily B (or Bush) in type but is considerably influenced by Mo (or Mongolian) features and to a lesser degree by M (or Mediterranean) qualities. These diagnoses of facial types are included in our table of non-metrical features. In short we are able to do with the face something more than the mere detection of geometrical form to which we are limited in the cranium. The facial types of the several fundamental human races are known; even if they cannot at present be represented by a distinctive mathematical formula, they can be represented by such symbols and the information used as a weapon to investigate racial hybridisation in a mathematical fashion.

The facial characteristics of the two main racial groups represented are as follows:—

- 1. Bush. Face from head to chin small and smoothly pentagonal in outline with an acute angle at the chin; almost vertical in profile, the forehead too being almost vertical, and the nose very little elevated; very slight sub-nasal prognathism and contour falling vertically from upper lip to the chin behind the nose; the nose short, broad and low, being only slightly projected anteriorly beyond the profile of the inflated infra-orbital region; wide interocular interval; oral region shapely, not protruding beyond the tip of the nose; long, convex, upper lip, mouth small but not pursed; lips, full but shapely, lower jaw short but stout suborally. The face as a whole is infantile and reminiscent of the foetal and distinctively pygmoid face, as I saw it in the Ituri and other Central African forests.
- 2. Boskop. Face large and ruggedly pentagonal in outline, the outstanding zygomata being associated with a narrow, generally trigonocephalic forehead, and a still more angulated chin than in the Bush type; prognathous in profile; forehead slightly retreating from the eyebrow ridges and glabellar region which are definite though not as prominent as in Australoid types; nose moderately long to suit the longer Boskop face, broader than the Bush nose and moderately high being distinctly projected anteriorly beyond the profile of the full (but not inflated) infra-orbital region; very wide inter-ocular interval; oral region protruded beyond the nose and giving the appearance of being too small to cover adequately the massive underlying jaws, this appearance being emphasised by the sunken cheeks in conformity with the infra-orbital excavation of the maxilla;

relatively short upper lips also convex (in contrast with the concave Negro upper lip); mouth large and wide both horizontally and vertically; lips strongly pursed but exposing a broad mucous rima. The mucous portion of the lips instead of being full and everted (as in the Negro) is relatively flaccid and tends to display a horizontally-running furrow dividing them, as it were, into double lips (in some cases this is so prominent in the face masks as to give the appearance of two slightly protruding tongues between narrow lips); fairly long but extremely wide face. The lower jaw is long and massive suborally and markedly receding thus emphasising the muzzle-like, or chimpanzoid appearance of the face.

The facial characteristics of each of these two human types is as divergent from the other, and from that of the Negro as it can well be; those of the other races are too well known to warrant description. The features upon which reliance was placed for diagnosis in the latter are detailed in the paper by Orford and Wells (loc.cit). The osteological features of the Boskop head have been thoroughly discussed meantime by Galloway (1937). For the application of these principles in our group compare Plates 85 to 92 inclusive.

In our second table, as already explained, I have ranged all the individuals in the series primarily according to their cephalic type as already determined. The four groups so found have been further subdivided according to the secondary facial characteristics of the individuals. In so small a group no useful purpose could be served by further subdivision according to tertiary facial characteristics, consequently we will confine ourselves to the data emerging here.

From the table (2) it will be seen that forty-three out of seventy-seven (or 55.8%) of the individuals are dominantly Bush in facial appearance, while thirty-four (or 44.2%) are dominantly Boskopoid. Thus the face, like the head, portrays the homogeneity or well-mixed character of the population. In no instance did the non-African races dominate the facial make-up of the individual; foreign faces are seen, as it were, through a mask which is Bush, or Boskop, or a mingling of the two.

The second arresting consideration was the paucity of Negro characteristics found. In only one (or 1.2%) of the whole group, viz., No. 71 madekap (see Plate 65), an infant of Bush type, were Negro characteristics obvious enough to give them secondary ranking; in four other Bush types (one being doubtful) they were sufficiently clear to be given tertiary rating; in only two Boskop types were Negro qualities suspected and

even then they could only be rated in the tertiary and quarternary categories. These facts help to explain why, despite the intrusion of the Negro into Southern Africa, Bush and Boskopoid types are persistent and prevalent amongst the Bantu; Orford and Wells (1936), Dart (1937).

We are therefore dealing here with a group of individuals who can be regarded for all practical purposes as unaffected by Negro admixture and who, whatever else they may be, cannot be looked upon as Bush-Bantu hybrids. They are an unselected sample embracing every available individual in all age-groups from earliest infancy to extreme old age of the pre-Bantu inhabitants of the Union of South Africa, salvaged, despite the flux of the last four hundred years, to give us a physical picture of that South African population, which knew not the Negro.

These conclusions find support in the metrical data supplied by the face. The average total (morphological) facial height is 102.2 mm. for males and 93.9 mm. for females; for ninety-eight Bantu women it was 110 mm. Hence the Boskop face (average 104.5 mm.) and the Bush face (average 92.1 mm.) are both appreciably shorter than the Bantu face. Indeed their adult facial lengths correspond approximately with those of 10 year old and 5 year old European children respectively while that of the Bantu corresponds with that of the 13-14 year old European.

The average facial (bizygomatic) width is 134.1 mm. for males and 122.5 mm. for females; for Bantu females it is 128 mm. Hence the Boskop face (average 134.8 mm.) is even wider than the Bantu face while the Bush face (average 119.7 mm.) is considerably narrower. The average adult Boskop face has a width corresponding with that of 17-18 year-youths, the average Bantu once again to that of 13-14 year children and the average Bush to that of 9-10 year children in Europeans (vide Martin, Bd. II, p. 713).

From these facts it is obvious that the facial relationships in Boskop and Bush types, while fairly harmonious with one another during growth, are divergent from those of both the Bantu and the European. The Bantu female mean facial index is mesoprosopic 86.1 and ranges from 73.3 (hypereuryprosopic) to 103.3 (hyperleptoprosopic) types but the mean facial index in this Bushman group is 76.6. From this mean neither the Boskop (average 77.5) nor the Bush (average 76.95) mean index fluctuates sufficiently far to bring either of them out of the hypereury-prosopic group. The adult range is from the very low index 66.2 to 82.4, a euryprosopic index still well below the Bantu female mean index.

Thus all three of these African types have short and broad faces and so contrast strongly with the moderately long and wide or mesoprosopic faces of the Brown and Mongolian races and also the very elongated and narrow or leptoprosopic faces of the Nordic and Armenoid races. At the same time the Boskop and Bush hypereuryprosopic faces, while allied to one another, contrast strongly with the euryprosopic Negro face. The pygmy faces examined by Schebesta and Lebzelter (1933) included types comprising as they put it "the whole human variation width," from hypereuryprosopy to hyperleptoprosopy. Facially therefore they appear to be far more hybridised than our Bushman group. Out of five hundred and two true Pygmy subjects the majority, two hundred and fifty-seven (or 51.2%) were hypereuryprosopic, one hundred and forty-one (or 28.1%) were euryprosopic and only seventy (or 13.9%) were mesoprosopic, twenty-seven (or 5.4%) leptoprosopic and seven (or 1.4%) hyperleptoprosopic respectively. In respect of the facial index therefore the Boskop and Bush types find their closest relationship with the characteristically hyper-euryprosopic Pygmy. As a human group the Bushmen are racially purer than the Pygmy.

SEE HISTOGRAM 2

The upper facial height tells a similar story there being on the average in our group only about 4 mm. of divergence between the males and females and between the Boskop and Bush types respectively. The average upper facial index (Boskop 44.1 and Bush 45.0) is euryenic but the range of indices varies from the hypereuryenic (37.2) to the mesenic (51.5) according to Broca's classification. In the Pygmies it ranges from the hypereurenic to the hyperleptenic class but the characteristic class is hypereurenic and euryenic as in our Bushman group.

The facial lengths index has been arrived at by comparing the upper (morphological) facial length with the total (morphological) facial length. Here, while there is little divergence between the average for male adults (55.0) and for females (56.1), the more massive mandible of Boskop types causes a relative lowering of the average for the Boskop (55.2) as compared with the average for the Bush (58.4) type.

Comparison of the adult averages and ranges for males and females and for our selected ten Boskop males and ten Bush females will, therefore, demonstrate that there is extremely little divergence between Bush and Boskop types in the general proportions of the head and face; they are therefore two racial groups, which are very closely related to one another and to the Pygmy in respect of their characteristic features; where we

encounter real divergence is in the absolute measurements and their averages. Thus the Boskop head is not only generally longer, wider and higher than the Bush head; the face has a wider frontal and orbital region, more projicient cheek bones, a wider and higher mandible, a greater upper and total facial height, more widely set-apart eyes, more exposed lips and a wider mouth.

The study of the individual parts of the face in this group and the manner in which they are affected in individuals by alien influence, would extend this contribution unduly. It is proposed that this should remain over for later and extended treatment in a separate comparative study of facial casts in the South African peoples, for which the material is now available. Certain matters relative to the nose and ear should however be amplified beyond what has already been stated.

Not only are the three actual dimensions of the Boskop nose greater than those of the Bush nose, but the indices (particularly the breadth-length and the depth-length) are appreciably higher in the Boskop than the Bush type. Seeing that the depth-breadth index is almost the same in both types, this means that the Boskop nose is absolutely larger but is relatively broader and more elevated than the Bush nose.

Profile views of the heads (see Plates 70, 72, etc.) reveal the wide variety of ear shape in the group. The typical, little, almost square, non-lobulated Bushman ear, very similar to the Pygmy ear, is well-known and has been figured by Martin (1928) who has also shown how it is inherited in South African Bastards. This type of ear is closely applied to the head and broadly adherent thereto.

Contrasting strongly with this type of ear is the equally non-lobulated, but pyriform organ seen in both men and women, slender below where it runs into the neck, and bellying out in its broad upper part and standing typically well away from the head, in some cases in a plane almost at right angles to the sagittal plane of the head. This, as it occurs in so many of the Boskopoid types of head, I define as the Boskop type of ear.

I thought the recognition of these two different types of primitive ear was new, until I found that R. Virchow (1887) has described each of them as occurring in a Bush man and a Hottentot woman respectively and has figured them with two beautiful etchings. Further illustration is therefore unnecessary here of this feature known to but unappreciated by the science for half a century.

Observations on the dentition and the order of its eruption were made in the field by Dr. J. Maingard; this work was carried out in a more

detailed fashion in Johannesburg by Mrs. Jean Laing with the assistance of casts of all the available palates and the upper and lower jaws. The investigation of her collected material is still proceeding and will appear in due course. It is sufficient at this stage to report that she has found variations in the form of the palate and the dentition, which corroborate our division of the group into its two main racial categories: Bush and Boskop.

The critical anthropological fact—that there are incorporated in this non-Negro racial matrix, formed by the fusion of Bush and Boskop peoples, eighteen (or 23.4%) of individuals portraying Mediterranean, twelve (or 15.6%) Armenoid and nineteen (or 24.7%) Mongolian features—shows that Mediterranean, Armenoid and Mongolian people were hybridising with the Bush-Boskop population of Southern Africa before it was invaded by the Negro. So thorough has the incorporation of alien blood from these racial sources in the Southern African population been that, as secondary facial characteristics, the Armenoid features occur as frequently as do the Boskop features, the Mediterranean virtually as frequently as the Bush features and the Mongolian features actually preponderate over all the others. This may mean that Mongolian people were in longer, or more intensive or more recent contact than either of the other alien groups.

Analysing the figures further (vide Table 2), we find that, of the eighteen individuals having Mediterranean features, eleven have Bush faces while seven have Boskop faces; similarly of the nineteen individuals having Mongolian features, twelve have Bush faces while seven have Boskop faces. In other words the probability of Mediterranean and Mongolian features emerging in Bush faces as compared with Boskop faces is roughly as 2:1. On the other hand, we find that of the twelve individuals having Armenoid features, eight have Boskop faces while four have Bush faces, and the order of probability in this concurrence is precisely reversed. These correspondences and their reversal are so nearly exact as to rule out the question of coincidence and connote one of two possibilities. Either the Armenoid characteristics were mediated by the Boskop Race and the Mediterranean and Mongolian by the Bush Race; or alternatively and more probably, some race-linked genetic mechanism is at work in doubling the probability that a gerontomorphic (or masculine) type, such as the Armenoid, will emerge in a gerontomorphic (or masculine) type like the Boskop; and similarly in doubling the probability that pedomorphic (or feminine) types, such as the Mediterranean and Mongolian, will emerge in a pedomorphic (or feminine) type such as the Bush.

Altogether the Asiatic types (Mongolian and Armenoid) outnumber the Brown (or Mediterranean) type facially in the proportion of 31:18 or approximately 3:2. In view of the fact that three alien types of face are striving, as it were, for expression in the Bush-Boskop complex and the dice are laden against the emergence of the Brown facial type in Boskop faces, the relatively high proportion of Brown types present is very remarkable.

In the Boskop cephalic group of seventeen individuals, thirteen have Boskop faces while four only are Bush; thus the probability of a relatively pure Boskop head's having a relatively pure Boskop face is as 3:1. Similarly if we consider the Bush cranial group of eighteen individuals, fourteen have Bush faces and four have Boskop faces; the probability of a relatively pure Bush head's having a relatively pure Bush face is similar, viz. as 3:1. Of the eighteen individuals with a Boskop-Bush cranium, ten have Boskop faces while eight have Bush faces; hence the chances in mixed heads of this sort are approximately equivalent that they will have Boskop or Bush faces. In the fourth group of twenty-four individuals with a Bush-Boskop cranium, an equivalency of the chances is not proven by the actual distribution since seven have Boskop and seventeen have Bush faces.

These mathematical facts arising from the correlational table support the conclusion that the Bush and Boskop races of mankind are genetically distinct, that they constitute true zoological varieties which have interbred in fertile fashion and that in such crosses Bush and Boskop features of both skull-cap and face have approximately equal chances of emerging.

These facial features of race are also sex-linked. Our group is as nearly as possible 50% male and 50% female. The thirty-eight males are so distributed that twenty-four have Boskop faces, while fourteen have Bush faces, i.e. the expectancy in the group is that Boskop faces will emerge in male faces twice as often as they do in female faces. Meantime the thirty-nine females are so distributed that twenty-nine have Bush faces, while ten have Boskop faces, i.e. the expectancy in the same group is that Bush faces will emerge in female faces three times as often as they do in male faces.

This linkage is so close that in our select group of thirteen individuals of Boskop cranial type and Boskop facial type there is only one female specimen, No. 43 /ai/ai, an infant. In a similar way in our select group of fourteen individuals of Bush cranial type and Bush facial type, there is only one male, No. 71 madekap, who is also an infant. Thus the probabilities are 12: 1 that a Boskop head, coupled with a Boskop face will be

male and 13:1 that a Bush head coupled with a Bush face will be female. There is no real evidence, perhaps the numbers are too small, that Mediterranean, Armenoid or Mongolian features are sex-linked; any slight preponderance lies in the direction of Mediterranean features emerging in female faces and of both Armenoid and Mongolian features emerging in male faces.

4. INHERITANCE OF CEPHALIC AND FACIAL FEATURES

The cephalic index as exhibited by the histogram varies from 69 to 83. Of the 77 individuals:

- 2 (or 2.6%) gave a value of below 70.99 and were therefore hyperdolichocephalic.
- 27 (or 35.1%) gave a value of 71-75.99 and were therefore dolichocephalic.
- 45 (or 58.4%) gave a value of 76-80.99 and were therefore mesatice-phalic.
- 3 (or 3.9%) gave a value of 81 or over and were therefore brachyce-phalic.

SEE HISTOGRAM 3

Using those figures for separating the cephalic groups, I am following the usual practice of anthropologists (e.g. Schultze) working with living subjects. If I had followed the practice advocated by Seligman (*Races of Africa*, p. 13) of subtracting two to obtain the cranial index, the proportions would have been three (or 3.9%) hyperdolichocephals: fifty (or 64.9%) dolichocephals: twenty-one (or 27.3%) mesaticephals: three (or 3.9%) brachycephals.

Amongst the thirty-four individuals of Boskopoid facies there are two (or 5.8%) hyperdolichocephals, twelve (or 35.3%) dolichocephals, and ten (or 58.9%) mesaticephals; amongst the forty-three individuals of Bush facies there are fourteen (or 32.6%) dolichocephals, twenty-six (or 60.4%) mesaticephals and three (or 7.0%) brachycephals. There are therefore no brachycephals amongst Boskopoid types and no hyperdolichocephals amongst Bush types. It seems clear that the Boskop skull in the pure state is usually dolichocephalic and that this is responsible for the tendency towards hyperdolichocephaly. The pure Bush skull, on the other hand, is not sufficiently removed from mesaticephaly to maintain a high percentage of dolichocephaly in a group where brachycephaly is present.

From what we now know of Boskop-male sex linkage it is not surprising that in his series of sevety-four male Hottentots from S.W. Africa and fifteen Bushmen chiefly from the Namib Desert, Western and Central Kalahari (together with twenty-five Hottentots and five Bushmen not so exhaustively examined as those in his series) L. Schultze (loc.cit) found that the total of one hundred and nineteen individuals gave twenty-one or (17.7%) hyperdolichocephalic, seventy-one (or 59.6%) dolichocephalic and twenty-seven (or 22.7%) mesaticephalic. The distribution was as follows:—

Hyperdolichocephalic		Dolichocephalic	Mesaticephalic	
In 99 Hottentots	20 (20.2%)	62 (62.6%)	17 (17.2%)	
In 20 Bushmen	1 (5.0%)	9 (45.0%)	10 (50.0%)	
Total 119	21 (17.7%)	71 (59.6%)	27 (22.7%)	

In other words the nearer we approach to a pure selection of Boskop or Bush type the less brachycephaly and the more dolichocephaly do we encounter.

The average index of fourteen Bush crania in this Department was 74.3 according to unpublished results of Mr. Berry, one of my assistants. Shrubsall (1907) found that 45.8% of the "Bushmen" included in his analysis (seventy-nine specimens in all) were dolichocephalic, 50.0% mesaticephalic and 4.2% brachycephalic. From these results we can be confident that the true Bush skull has a dolichocephaly verging on mesaticephaly. The peak of this whole group is at index 76, i.e. just within the range of dolichocephaly and verging on mesaticephaly. Fifty or approximately 65% of the whole group are ranged within indices 74-77.

It is to be expected that, when the short narrow Bush and long wide Boskop cephalic types interbreed, a mixture of short and wide heads (mesaticephals) should appear. This in point of fact occurs as is evidenced by Schultze's series. But it is noteworthy that in his series, chiefly from the north-western area of Bush-Hottentot territory, no brachycephals whatsoever appear; we are justified in assuming that the crossing of Bush and Boskop types cannot of itself produce a head so short and wide that it becomes brachycephalic and that, in other words, the appearance of brachycephaly is genuine evidence of Oriental influence—the Orient being the well-known home of brachycephaly.

The results secured by different investigators relative to the incidence of cephalic types in Bush-Hottentot series thus becomes important as evidence for Oriental contact,

Region and Investigator.	Numbers	Hyper dolichoce cephalic		- Mesati- cephalic	Brachy cephalic
North-west (Schultze)	99 Hottentots) 20 Bushmen	21 (17.7%)	71 (59.6%)	27 (22.7%)	erritates
Central (Dart)	77 Bushmen		21 (35.1%)	45 (58.4%)	3 (3.9%)
Southern Coast. (Shrubsall)	12 Strandloope	rs —	25%	60%	15%

Schultze found no brachycephals in his Bush-Hottentot series from South-West Africa and the Kalahari (even though their geographical distribution in isolated cases stretched as far south as Kimberley). Our Bush series which was, on the whole, situated considerably further to the South-east than Schultze's series, contained three (or 3.9%) brachycephals and four others verging on brachycephaly. Shrubsalls' (loc.cit) series of Southern coastal Strandloopers contained 15% brachycephals. This phenomenon disposes of the possible contention that brachycephaly amongst the Koisan peoples might have arisen by the crossing of these two divergent dolichocephalic Bush and Boskop stocks. If brachycephaly had arisen in that fashion, it would have been encountered with similar frequency over the whole territory; on the contrary it becomes far more frequent the nearer we approach to the South-eastern coast line. Moreover, as brachycephaly increases, so too does the proportion of mesaticephaly. Mesaticephaly is comparatively infrequent in the relatively pure crossing of the essentially dolichocephalic Bush and Boskop types of the north-western area of their distribution (vide Schultze's series). It becomes proportionately more greatly increased when the two dolichocephalic strains (one of which, namely the Bushman, already verges on mesaticephaly) become complicated with a brachycephalic strain, as happened along the South-eastern coastline more especially.

Baur, Fischer and Lenz have pointed out (1931, p. 126) that from the investigations of Frets amongst Dutch families, of Schreiner amongst Norwegians, of Hilden amongst Finns and of Bryn also amongst Norwegians "There can no longer be any doubt that the development of the shape of the skull is controlled by the mendelian laws of inheritance. Brachycephaly is dominant over mesocephaly and mesocephaly is dominant over brachycephaly...... The finest outcome of the beforementioned researches with their demonstration of a mendelian inheritance of the shape of the skull, is that they explain why, after thousands of years of the mingling of races in Europe, and among the emigrant Europeans in other parts of the world, there has not been produced a population with an average shape of skull, but that instead we find everywhere to-day, as of old, dolichocephals, mesocephals and brachycephals. As regards the width of the face, too, there is considerable evidence to show that mendelian rules apply. Although the Red Indians have broad faces and the white inhabitants of the United States have narrow faces, persons of mixed Indian and white descent in various degrees do not show an average breadth of face, but incline now to one and now to the other parental form. We find the same thing in crosses between the Hottentots and the Boers. There is no question of a mingling of characters or of the production of one single form such as could only be due to environmental influences; both the parental forms continue to exist side by side."

These European workers have concentrated attention on indices in large groups of people; we have studied here the cranium and the face as separate wholes in a restricted group and then correlated them. But the results of the two types of study support the thesis that, despite identical environmental influences, when races cross they do not produce one single form; the parental forms continue to exist side by side.

Even in our small group we find families evincing a strong tendency towards the inheritance of facial characteristics. Thus the Bush-Mongoloid features of No. 10 thobaku emerge in her son No. 12 tsaman II and her daughter No. 13 //amme and the Bush-Mediterranean features of /khanako in most of her daughters (see Plate 57). Similarly the Boskopoid features of No. 44 /aol pwa II (Plate 89) emerge in his daughters No. 23 \(\neq \text{gauke}\) (Plate 85) and No. 45 /kxube (Plate 86) and those of No. 37 /kuribe (Plate 90) and No. 38 /kxun/i (Plate 88) come out in every one of their children (Plate 61). When therefore we discover that all the children and grandchildren of a Boskopoid type like No. 4 abraham show no such tendency, we may assume that his first wife ou/khoro was a Bush type; further as abraham's secondary characters are Armenoid and only one of his grandchildren No. 7 marta shows the like, while the remainder evince Mediterranean and to a much lesser extent Mongoloid stigmata, we may

also assume that any facial tendencies ou/khoro had beyond the Bush type would have been in those directions racially.

Apparently for the production of Boskopoid types the genes require to be carried by both parents. When both parents (e.g. No. 37 !kuribe and No. 38 !kxun/i are predominantly Boskop in type all the children show Boskop traits, viz.:—!kamku, tamtam, |gom|korop, !kaap and |ai|ai.

On the other hand although abraham is strongly Boskop in head and face, some of his offspring by ou khoro, e.g. malxas and by thobaku, e.g. tsaman are Boskop types while others of his descendants by the same wives e.g. /khanako and //amme are strongly Bush. /khanako's children in turn are strikingly Bush, only klein /khanako and kuskai showing much of the Boskop element. Apparently abraham's first wife ou/khoro was as Bush in character as thobaku or /khanako despite her being a sister of !kuribe, |unuu and \(\neq ubeiku II \) (see Plates 89 and 90).

I referred earlier to the limitations confronting investigation of the head. The faces of different races are so full of divergent features which have been repeatedly described, pictured and caricatured by scientists, artists and laymen over centuries, that the racial terms when used conjure up a picture in every educated mind. Anthropology itself is only in the process of determining what we may term the racial characters of the head as distinct from those of the face.

The fundamental discovery along this channel of enquiry, was Retzius's mathematical separation of brachycephals from dolichocephals which, as time has proved, has served to separate Asiatic from European and African skull types (Dart 1937). To explore the degree of correlation between the Mongolian stigmata seen in Bushman faces and cephalic form, I have recorded on the graph of cephalic index (Histogram 2) the incidence of the Mongolian facies and also of Mongolian eye-folds in the group.

It will be seen that no correlation can be established between brachycephaly and either facial type or folds nor even between facial type and folds. All three stigmata namely a high cephalic index, a mongolian facies and folds do occur in single individuals such as No. 14 & !heixa, No. 10 \times thobaku and No. 66 \times //nwahu, but at the opposite extreme No. 69 \times /alakap combines a mongoloid face with an ultra-dolichocephalic head.

The most brachycephalic individual, No. 59 & tsap, is the infant son of No. 54 \(\rightarrow \) suxuu (see Plate 67) who is almost brachycephalic, and an

inaccessible father !hauxe or witbooi. The brachycephal No. $9 \ \$ kuskai is the youngest daughter of No. $5 \ \ \$ /khanako who falls in the mesaticephalic group, and an inaccessible "Hottentot" father (see Plate 57). The parents of the third brachycephal No. $14 \ \ \$!heixa (see Plates 71, 72, 73 and 74) were not available for examination. In connection with the inheritance of brachycephalic head-form we may note that the almost brachycephalic No. $10 \ \ \$ thobaku bore the near brachycephalic No. $11 \ \ \$ dataani to an inaccessible Bushman father (see Plate 57).

Seeing that cephalic and facial features are inherited but that there is no absolute correlation of cephalic with facial stigmata nor even of one facial stigma with another facial stigma of the same race, the summit of our present capacity in tracing hybridism is to isolate racial stigmata, as far as that is possible and examine their incidence.

Another cardinal point concerning inheritance of cephalic characters and one in which the races of Southern Africa differ from those of Western Europe is worthy of notice. Despite the large number (19) of individuals with well-marked Mongolian facial features, the majority (10) have dolichocephalic skulls, seven (7) are mesaticephalic and only one (1) is brachycephalic. The other two (2) brachycephals have Mediterranean features. There is nothing here to prove that "brachycephaly is dominant over mesocephaly and mesocephaly is dominant over dolichocephaly" as is claimed in Europe (Baur, Fischer and Lenz, loc. cit). It is true, as we have seen, that mesaticephaly is increased when brachycephaly is present; but, if brachycephaly were dominant over mesocephaly and mesocephaly over dolichocephaly in Southern Africa, one should ere this

late period in time have anticipated a more striking proportion of brachycephals in both the Bush and the Bantu population. Numerically the mesaticephals preponderate in our group but, even if we were to admit on that account a "dominance of mesocephaly," our enquiry has not progressed appreciably towards a solution on genetic lines seeing that mesocephaly is not a characteristic of any single race. Mesaticephaly is the multitudinous, ever-increasing hotch-potch of intermediate types always found when several extreme genetic types in terms of head length and breadth interbreed and prove fertile.

Since the Armenoid and Mongolian races are both brachycephalic they are inseparable from one another as regards the head; but it is surprising, when these two Asiatic facial types outnumber Brown (or Mediterranean) facial types as 3:2 and when brachycephaly is so dominant in Europe that brachycephaly is so rare in our group. The explanation probably lies in the fact that it is struggling for emergence against three different dolichocephalic strains—Boskop, Bush and Brown respectively. What then is the effect, if any, of the Brown race on the Bush and Boskop skull?

Since it is not characteristic of either the Bush or the Boskop race, the obtuse form of pentagonoidy found in each group must be produced either by bastardisation of these two types with one another or with alien types of head form (see Table 1). It does not seem likely that two acute pentagonoidal types could, by hybridisation, produce an obtuse one, i.e. that two narrow-foreheaded stocks would elicit a broad one. Six of the ten brachycephals and near brachycephals fall into the obtuse pentagonoidal group; therefore some of the modification in Bushman skull-form in the direction of obtusity may possibly be due to Asiatic (Mongoloid and Armenoid) influence.

The cranial form of the Mediterranean or Brown race, on the other hand, is typically pentagonoides obtusus even to verging on the ovoid especially when compared with the acute types of the Bush and Boskop races (vide Elliot Smith 1923). In length the Brown skull also ranges between that of the Bush and that of the Boskop type; well over 50 per cent of the skulls from Ancient Egypt (vide Sergi 1901) measure between 180 and 190 mm. in length. There is therefore little doubt that the obtusity of contour (see Plates 86 and 88) found in more than 30 per cent of these pentagonoid heads is principally due to admixture with the Brown race and that pentagonoid heads measuring between 180-190 mm. are due not to the hybridisation of the short Bush with the long Boskop type of skull, but rather to the hybridisation of each type with pentagonoid Brown skulls of obtuse form and intermediate length. This

view is corroborated by the fact that obtuse types are present in approximately the same ratio in both Boskop and Bush types as identified.

We have found therefore that, of all alien racial types modifying the shape, appearance and measurements of the ancestral Boskop and Bush racial types as presented by the heads and faces of this group, the influence of the Brown race has been relatively the most profound. This highly significant fact corroborates the theory, for which I have already advanced many cogent considerations, of an intimate admixture of the Brown and Bush races in Eastern Africa. According to that hypothesis, the infiltration of the Brown Race into the Bush Race had begun during the prehistoric period when the Bush Race were dispersed as the dominant human physical type from the Cape of Good Hope to the Red Sea, and before either Negro or Asiatic peoples had invaded the Eastern seaboard of Africa. The preliminary bastardisation of the Brown Race with the Bush Race was responsible in my estimation for the ortho-pentagonoidal types found in any considerable collection of Bush skulls and which occur with greater frequency in a collection of Bush skulls than they do in any collection of Bantu skulls of similar size; it seemed that such ortho-pentagonoidal types, as appeared amongst the Bantu, had their source in the admixture of this bastardised Bush-Brown racial product with the Negroes to form the Southern Bantu of to-day.

If we now compare the percentages (vide Table 2) of alien features present in the faces of our Bush with the percentages of alien faces seen in the previously mentioned Bantu groups examined by Orford and Wells (loc.cit) and Wells and de Saxe (Dart 1937), the most striking feature is the relative paucity of Armenoid and Mongoloid features in the Bantu and the relative preponderance of Bush features over Brown (Mediterranean or "Caucasoid") features in the Bantu. It is apparent that when the Negro and Bush groups impinged on one another to form the Bantu, the resultant mixture could have received not only the major portion of its Brown racial characteristics but also its Armenoid and Mongoloid features from and through the Bush peoples, who constitute to-day 25.0% to 32.7% of the physical make-up of the Bantu.

5. BODILY HABITUS

In 1920, when I was working with the late Dr. A. Mills, the late celebrated St. Louis radiologist, he had examined the distribution of bodily habitus in Europeans and was enquiring to what extent the four bodily types: hypersthenic, sthenic, hyposthenic and asthenic, he encountered amongst them and considered fundamental, were present

in other races. A further point upon which he desired information was the age at which the bodily type was discernible.

Grouped according to Mill's (1917) system the incidence of bodily habitus is as follows (Compare Plates 69 to 76 inclusive):—

Sthenic

Adults	Male:	Nos. 1. 4. 14. 19. 20. 22. 37. 53. 57. 61. 63. 69	
		73. 74. 75.	=15
33	Female:	Nos. 8. 30. 33. 45. 70.	== 5
Children	Male:	Nos. 11. 41. 42. 46. 60. 67. 71.	= 7
,,	Female:	Nos. 3. 9. 13. 27. 43. 50. 55. 68.	= 8
		Sthenic—Hyposthenic	
Adults	Male:	Nos. 16. 28. 47.	= 3
23	Female:	Nos. 21. 29. 39. 49. 62.	= 5
Children	Male:	Nos. 24. 25. 72.	= 3
**	Female:	Nos. 26. 32.	= 2
		Hyposthenic	
Adults	Male:	Nos. 17. 40. 44. 56. 77.	= 5
1)	Female:	Nos. 2. 5. 6. 7. 10. 15. 18. 23. 38. 48. 51. 52.	
		54(++). 58.64	=15
Children	Male	Nos. 12. 36. 59. 66.	= 4
"	Female:	Nos. 31. 34. 35. 65.	= 4

Asthenic				
Adult male:	No. 76		= 1	

These may be tabulated thus:-

		Asthenic	Hypo-	Hyposthenic to sthenic	Sthenic	Total
Adult	Male	1	5	3	15	24
**	Female	0	15	5	5	25
Child	Male	0	4	3	7	14
,,	Female	0	4	2	8	14
Male '	Total:	1	9	6	22	38
Femal	e Total:	0	19	7	13	39
Grand	'Total:	1 .	28	13	35	77

From this table it is apparent that neither the extreme hypersthenic nor the asthenic types of Mills, found amongst Europeans, can be regarded as typical of Bushmen. They are not therefore typical of the Bush or Boskop races of mankind. The most prevalent bodily type is one that is sthenic in build, but it accounts for less than half of the individuals. Amongst the adults the sexes differ in presenting exactly reversed proportions of sthenic and hyposthenic types. This does not denote a sexual difference; as we have seen more of the males betray Boskopoid features and more of the females genuine Bush teatures. The majority of the pure Bush specimens are hyposthenic and the majority of the pure Boskop are of the sthenic type of bodily habitus. On the other hand the presence of an asthenic male and a goodly proportion of hyposthenic types in males argues in favour of admixture with some thoroughly hyposthenic racial type, which cannot be Boskop or Negro, as they are sthenic and hypersthenic respectively. The nearest source in Africa of such hyposthenic-asthenic stock—as the European population is largely composed of—is the Brown (Mediterranean or Hamitic) stock, which is characterised by its delicate and almost effeminate skeletal structure (vide Elliot Smith 1923).

I will not insert the tables used for the purpose but merely state that the asthenic individual is of Mediterranean type and that, in both the Boskop and Bush groups, the Mediterranean types have more frequently a hyposthenic bodily habitus (vide Table of measurements). Mongoloid types in both Boskop and Bush groups are generally sthenic. Armenoid types in the Boskop group are preponderantly sthenic, in the Bush group they are hyposthenic. These facts indicate that the Boskop and Mongol types are sthenic and that the Bush and Mediterranean types tend rather to hypostheny, the Armenoid being intermediate.

There are no hypersthenic types such as Orford and Wells found amongst the Bantu, especially in the blatantly Negro types. Our facts corroborate theirs in discovering the Bush and Mediterranean types in the Bantu to be characteristically hyposthenic, while the Mongol types there also were sthenic.

The body type is discernible in infants but becomes more emphasised as they grow up, the majority of the children being of the sthenic category (vide Plates 81 and 82 etc.). It may perhaps be argued from the sthenic character of the Boskop people and the prevalence in youth and adulthood of the sthenic type amongst the Koisan and also the Bantu peoples that a sthenic bodily habitus is the ancestral type from which the other forms exhibited by living mankind are derived.

6. STATURE

During a journey from the Zambesi River on about 150 latitude (opposite Lialui) across Central Angola to the Cuelei River near the 160 East longitude, Miss D. F. Bleek (loc. cit) examined the !kū or !kūn Bushmen at Ninde Mission Station on the Ninde River, on the Kutsi River, on the Kunzumbia River, a tributary of the Lomba and on the Mushombu River a tributary of the Cuevi (between the Cuevi and Cuelei Rivers). Twenty-two men and twenty-two women were measured as to height, giving:—

		Men	Women
T'allest		170 cm.	161.3 cm.
Shortest	 	145.5 cm.	135 cm.
Average	 	159.3 cm.	148.8 c.m.

The average height of both series was 154 cm., a distinct increase, as the records show, on the height of all Bushmen south of the tropic of Capricorn.

Hans Schinz (1884-87) found the average stature of fifty individuals to be 157 cm., the tallest being 167 cm. and the smallest 149 c.m amongst the //aiSan living between Xausis and Rietfontein or /kunobis in the northern part of the Kalahari. Dornan (1925) measured people from the northern and eastern portions of the Kalahari; he gives no numbers nor does he specify the tribes; he states that those measured, men and women ranged from 4'9" up to 5'0". He says however that he has seen Bushmen up to six feet in height and that Baines, Mackenzie and Hodson mention that they met Masarwas around Lake Ngami who were six feet and upwards in height and broad in proportion. These facts go to show that the Bushmen in the North of Bechuanaland and South West Africa, as well as those in Central Angola, are considerably hybridised with tall stocks.

Seiner (1912) found the following values relative to Bush peoples examined by him in Northern and Central parts of the Kalahari:—

	j	Height (in cms.))	
Males.	Total	Maximum	Minimum	Average
74 !Kung	11557.7	171.3	142.2	156.4
8 //Ogowe	1226.8	162.5	144.9	153.3
15 Hei//kum	2286.8	168.3	142.2	155.4
97	15071.3	171.3	142.2	155.4

Height (in cms.)				
Females.	Total	Maximum	Minimum	Average
18 !Kung 3 Hei//kum	2668.2 436.9	158.3 153.5	138.3 137.6	148.2 145.6
21	3105.1	158.3	137.6	147.9

In respect to stature the tallest adult individual in our group is No. $37 \, \text{\ref lkuribe}$ (164.8 cm.), the shortest is No. $10 \, \text{\ref lkuribe}$ (135.6 cm.). The average of the adult males is 155.82 cm. and of the adult females 145.97 cm. and of all adults 150.77 cm. (see Plates 69-76 inclusive).

Fritsch (1872) found the average height of six men to be 144.4 cm, and of five women 144.8 cm. Von Luschan (1914) having measured forty-one "racially pure individuals" gives the average stature of both men and women as about 140 cm. and the maximum for pure-blooded people as 146 cm. It is a generally recognised fact (vide Schapera 1930) that the further north we go the taller the various Bushmen tribes appear to be, probably as a result of racial admixture.

Only two individuals of predominantly Bush facies:—viz. No. 1 malxas (149.1 cm.), and No. 14 !heixa (149.6) have a stature greater than 147 cm., similarly only two adult individuals of predominantly Boskop facies, viz. No. 4 abraham (144.1 cm.) and No. 58 \(\neq abaitu\) (140.25 cm.) have a stature below 147.8 cm. My interpretation of these facts is that the Bushmen (the average of our ten Bush females is 143.65 cm.) are a pygmy race, hybridised chiefly with at least one other taller race (the Boskop Race), whose average stature could have been equal to or slightly greater than that of Negro females. The average of our ten Boskop males is 158.6 cm. and that of the ninety-eight Bantu females 158.0 cm. The tallest individuals in the series have a Boskop-Armenoid or Boskop-Mediterranean facies. One female only, namely No. 70 tatabesa had stature (159.4 cm.) greater than 155 cm; the female stature characteristically fluctuates between 135 and 155 cm. Within these limits they fall into three groups:—

- A short-statured, truly pygmoid group ranging from 135-140 cm. and including No. 10 thobaku, No. 5 /khanako, No. 7 marta, No. 54 suxuu, No. 57 ≠abaitu and No. 62 /abes.
- An intermediate group ranging from 140-150 cm. and including No. 21 mamas, No. 18 /am≠ari, No. 30 ou tsamas, No. 51 /keri/keri, No. 23 ≠gauke, No. 45 !kxube, No. 15 !kai/ko and No. 38 !kxun/i.

3. A high-statured group ranging from 150-155 cm. and including No. 48 /kuruke, No. 29 haki, No. 49 /kawi II and No. 39 !kamku II.

Corresponding, as it were, with these three female groups there are three male groups.

- 1. A short-statured group ranging from 145-150 cm. and including No. 4 abraham, No. 1 malxas and No. 16 ≠ubeiku II.
- 2. An intermediate group ranging from 150-155 cms. and including No. 14 !heixa, No. 20 !kwoi/kan, No. 61 uye, No. 75 koos, and No. 69 |alakap.
- 3. A high-statured group ranging from 155-160 cm. and including No. 73 /unuu, No. 28 //khaku, No. 44 /alo pwa II, No. 53 lukas, No. 74 saap, No. 76 maarman, No. 47 ≠en, No. 22 //am//na, No. 19 witteman, and No. 17 //kabbe II. There are only two individuals with a stature appreciably above 160 cm. namely No. 77 ari (161.6 cm.) and No. 37 !kuribe (164.8 cm.).

The three corresponding grades of stature in both sexes of the group may be explicable in terms of crossing or hybridisation of two strains, as has already been suggested. On the other hand the possibility that it is due to the representation of three principal divergent strains (Bush, Boskop and Brown races) in the group should not be overlooked.

SEE HISTOGRAM 4

When the actual statures are plotted on a histogram against age, the stature of the males tends to follow a curve approximately 10 cm. higher than that of the females. The same tendency is still more evidenced when males of "Bush" stature are compared with females of "Bush" stature, and males of "Boskop" stature are compared with females of "Boskop" stature.

There is only partial correlation of head-form with stature. Thus the average of the seven fully adult males of small or "Bush" stature, (malxas, abraham, !heixa, uye, \nequivubeiku II, koos and !kwoi/kan) is 149 cms, while the average of eleven adult females of "Bush" stature (!kweike, |khanako, marta, thobaku, |am\neqair, mamas, ou tsamas, suxuu VI, \neqabaitu, |abes and |keri/keri) is 141.6 cms. The average of thirteen adult males of large or "Boskop" stature (!/kabbe II, witteman, !/am|/na, |/khaku, !kuribe, |alo@pwa II, \neqein, lukas, |unuu, saap, maarman, ari II and |alakap) is 157.6 cms., while the average of ten adult females of "Boskop" stature (!kai/ko, \neqgauke, haki, !kxun/i, !kamku II, !kxube,

/kuruke, /kawi II, //kobe and tatabesa) is 150.8 cms. If, in these groups, the true Boskop stature is being reduced by admixture with Bush elements and the true Bush stature increased by admixture with Boskop elements, our conclusions about the actual gap, about 10 cm., which separates the Bush from the Boskop race in terms of stature, are corroborated. A similar gap of approximately 10 cm. separates males from females in each group; hence the stature of Bush males is approximately identical with that of Boskop females.

Schebesta and Lebzelter (loc. cit) found the average height amongst Ituri pygmies to be 133.5 cm. for females and 146 cm. for males, amongst *Batwa* of Ruanda to be 141 cm. for females and 153 cm. for males, and amongst *Bacwa* of Province d'Equateur to be 148.6 cm. for females and 159 cm. for males.

They recognised all these groups to be hybridised, the Ituri being the purest. There one female of only 118 cm. was found; only twenty-five individuals were over 150 cm. and all were below 160 cm. Although the most frequent type of height amongst the so-called true pygmies is in the vicinity of 136 cm. for females and 144 cm. for males—a group corresponding with our short-statured female and male Bushmen—there may be present amongst pygmies another still shorter-statured group (females 125-130 cm., males 135-140 cm.) which is totally unrepresented amongst our Bushmen.

Only a deliberate comparative study of chosen Bush and Pygmy groups can resolve the question of their precise stature inter-relationship; for the present we must satisfy ourselves with the knowledge that the most prevalent stature-type found amongst them occurs, but is not common amongst these Bushmen.

The stature differences found in adults are repeated in the different age groups, as far as can be detected from the small number available. From a height of 60-70 cm. during the first year of life they grow steadily to 100-120 cm. in the seventh or eighth year. There is then a fairly sudden increase in growth over the next two years to 130-140 cm. from which point onwards stature is stationary until the seventeenth or eighteenth year, when another slight increment may occur. The range of height shown by the series at this age period is 140-155 cm. but as it is even greater (135-160 cm.) at the thirty age period it is clear that little growth occurs in some individuals after the tenth or eleventh year of life.

The termination of this growth period marks the onset of puberty as is shown by No. 8. *lena* and No. 64 *khoitamas* in their eleventh year and who are all on the verge of womanhood and by No. 6 *klein |khanako*

apparently in her thirteenth year, whose menstrual cycle is already established. The terminal growth spurt (17-20 years) is the one during which the males overshoot the females.

7. THE LIMBS

The limbs present a picture corresponding with that of the stature. The arm length (measured from acromion to middle finger-tip in the anatomical position) shows an average for males (70.47 cm.) 6.3 cm. greater than that for females (64.19 cm.) whereas the average for our ten pronouncedly Boskop males (71.63 cm.) is 8.6. cm. greater than that for the corresponding ten Bush females (63.01 cm). The leg length has been taken both from the trochanter and also from the highest point of the iliac crest (cristal). The results for both measurements correspond but the cristal point gives a more fixed site from which to take measurements and is used here in preference to the trochanteric for that reason. The average cristal height for males (93.79 cm.) is 4.5 cm. greater than that for females (89.25 cm.) whereas the average for Boskop males (95.81 cm.) is 7.7 cm. greater than that for Bush females (88.14 cm.).

From these measurements and the intermembral indices it follows that the males as a group have longer arms and longer legs than the females, that Boskop arms and legs are longer than Bush arms and legs and, further, that the arms are slightly longer in relation to the legs in the Boskop type, i.e. that it is, if anything, a more primitive or anthropoidal type in this respect that the Bush type. It must be noted, however, that none of the average values given by the (trochanteric) intermembral index (85 and 83) here are as high (i.e. anthropoidal) as those given by Orford and Wells group of Bantu women (88.0).

The lenghts of the arms and the legs relative to the stature present no outstanding feature for comment; in these there are remarkable correspondences between males and females and between the Boskop and Bush types. As the mean value found for the arm-stature index in Bantu women was 45.6 and therefore identical with that for Boskop males, there is correspondence in this proportion between our present types and even the Negro type. The relative (trochanteric) leg-length (52.7) on the other hand is slightly larger than that for Bantu women (51.7).

8. THE TRUNK

The growth changes and range of variation in the three main transverse diameters of the trunk are exhibited in Histogram 5. The separation in two, possibly three, types of essential value for each age group is particularly displayed by the biacromial diameter.

Orford and Wells (loc. cit) showed that, of the trunk diameters the biacromial (shoulder) breadth has the narrowest range of variation in Bantu women (29-39 cm.). In our group the range is still less and varies from 29-36 cm. In their series this diameter gave a double-peaked curve, the peaks being at 34-36 cm. and 37-38 cm. respectively; in our group the upper curve is absent but we have a double curve with peaks at 30 cm. and 34 cm. respectively and perhaps a third peak at 36 cm. The average for males is 33.0 cm. and for females 30.3 cm., whilst those for the Boskop and Bush are 35.45 and 29.76 respectively.

That sex cannot account entirely for this phenomenon is shown by the fact that some males have a shoulder-width lower than that of the female or even the Bush average. It is reasonable to conclude that a difference of about 5.0 cm. separates the Boskop from the Bush type in shoulder breadth, and that the Bush type is responsible for the "tail" of subjects with low diameters, (below 33.0 cm.) commented upon by Orford and Wells in their series. Their principal Bantu peak at 34-36 cm. corresponds with our higher measurements and our Boskop average. It appears from these facts that the genuine hypersthenic Negro type is chiefly responsible for such great biacromial diameters 36-39 cm. as they recorded in their Bantu female group.

SEE HISTOGRAM 5

No real divergence of the Boskop from the Bush type is shown in the relation between the shoulder diameter and the height (biacromio-stature index) and very little between males and females in the same feature. Its range (18.9-23.8) is narrower than that of Bantu females (18-25), yet its mean (21.6) is smaller (22.2).

On the other hand the relation between the pelvic and shoulder diameters (intercristal-biacromial index) reveals a strong disparity between males (68.2) and females (74.8) although the range for the males is greater than that for the females. The Boskop type (69.6) is also shown to have relatively narrower hips than the Bush type (76.0). The means isolated by Orford and Wells in Bantu females were 74.0 and 73.2 for Negro and Bush types respectively. Seeing that Europeans and Asiatic groups all exceed 80, the very low mean indicial value given by the Boskop type is very significant. This primitive relationship of shoulder to hip assumes still greater racially diagnostic significance when we know that the average Boskop pelvis is larger in all absolute dimensions than the average Bush pelvis. It is of the order given by the Fan, Fiot, M'Baka and Batwa peoples of Africa recorded by Martin (1928, Bd 2, p. 357).

There is a more capacious chest in males than in females and in the Boskop type than in the Bush type. The dimensions of the Bush female chest correspond with those of 14-15 year old Europeans and those of the Boskop male chest with those of adult Europeans, save that the transverse diameter is greatly reduced (and consequently the chest form is more primitive) in the Boskop type; the thoracic index is thereby considerably lowered. The Boskop mean thoracic index (123.9) is lower than the Bush (126.8) and the mean index provided by males as a whole (121.8) far lower than that of the females (128.9). Mean indices of this low order do not appear even in Negro infants of the 1-5 year old life period, and the only adult group recorded by Martin with a comparable index are the Bugu (124.0). The mean index in Negroes is 138.0 and in Europeans 142-149. Hence the Boskop male chest is the most primitive known living type of chest and the Bush chest (even that of females) closely approximates it in form but is smaller in its dimensions.

Histogram 6 shows the distribution of the three pelvic diameters for all age groups. Whereas the most frequent measurement from front to back (external conjugate diameter) is 19.0 cm. and virtually two-thirds of the adults fall in the 19-20 cm. portion of the histogram, the interspinous diameter has a wider average range and tends to a double peaking at 17 cm. and 19-20 cm. respectively. This tendency is definitely displayed by the intercristal diameter which shows peaks at 23 cm. and 25 cm. respectively.

SEE HISTOGRAM 6

These measurements contrast with those for Bantu women. The external conjugate peak is almost identical with the Bantu peak but whereas here only one individual No. 39 \(\frac{9}{kamku} \) II gives a graph value above 21.0 cm., in the Bantu there is a "tail" of individuals, all of Negro facies, of high diameter (23.5 cm. and over) and a considerable number, when all above 21 cm., are included. Again only one individual viz.—!kamku II's father, No. 37 !kuribe, with an interspinous diameter over 22 cm., whereas in the Bantu this value is virtually the mean and the peak of the group and values appear there up to 28 cm. Similarly !kuribe is the only individual with a value above 25 cm. on the histogram of intercristal diameter; the mean for Bantu women is 25.6 cm. so practically the entire Bushman range falls below the Bantu female mean; three-fifths of those with Negro facies are within the range 25-28 cm., but there is a tail of individuals chiefly of Negro facial type with measurements ranging beyond 28 cm. and up to 33 cm.

The pelvic region of the trunk is of particular interest since it is precisely here that, if the differences between Boskop and Bush types were merely those of a sexual character, we would expect an answer in the form of a bigger (or female type) of pelvis in the Bush than in the Boskop type. On the contrary whether we consider the ranges of the intercristal, interspinous or external conjugate diameters of the pelvis, we find that the males equal or exceed the females and the Boskop always exceeds the Bush. In only one diameter the bitrochanteric (24-32 cm.) does the Bush range include specimens wider than those included in the Boskop range (25-29 cm.), but it also includes specimens that are narrower in this measurement than those in the Boskop range. The average Boskop pelvis is therefore 1.4 cm. wider and 1.0 cm. deeper from front to back than the Bush pelvis.

The mean of the interspinous diameter in Bantu females is 22.2 cm., in the European it is 25 cm. In the males and females of this group it is 19.1 and 19.2 respectively, but the Boskop males give a mean of 19.8 as compared with the Bush female mean of 18.8.

The mean intercristal diameter in Bantu females is 25.6, in the European it is 27.5; in the females of this group it is 22.8 cm. and in the males 23.4 cm. The Boskop mean 24.0 cm. is greater than the Bush mean 22.6 cm.

The mean external conjugate diameter in Bantu females is 20.0 cm., in the European it is 18.5 c.m.; in the females of this group it is 18.2 cm. and in the males 19.1 cm. The Boskop mean 19.4 stands near to the Bantu female mean, while the Bush mean 18.1 is less than that of the European.

From these low mean dimensions it is clear that the Bush type of pelvis (18.8, 22.6 and 18.1 cm.) is the smallest in Southern Africa; these averages agree closely with those found by Orford (1934) for the Bush pelvis. The Boskop type of pelvis (19.8, 24.0 and 19.4 cm.) is a larger type but, while more massive, is of essentially similar form. It approaches in size that of the Negro female (22.2, 25.6 and 20 cm.) which however is larger and has also changed in form by relative lateral expansion, a change in the direction the European female (25.0, 27.5 and 18.5 cm.) has followed to an extreme stage.

The interspinous-intercristal index reveals the degree of inversion of the anterior iliac spines relative to the crest. It has already been shown by Orford and Wells that Bantu women of Bush facies have a higher index, i.e. tend to have less-inverted spines than do those of Negro and Mediterranean facies. Our females (average 83.5) have less inverted

spines than the males (average 81.7) and there is a tendency for the Bush (average 83.7) to be less inverted than the Boskop average (82.8). The great adult range of this index (71.7-99.3) however shows in the face of the close correspondence between the Bush and Boskop averages that very divergent pelvic types are influencing the pattern in the group.

This is demonstrated to some extent by the external conjugate-intercristal index which ranges from 69.6 to 90.9 with a mean at 81.5. In the European female the mean value of this index is 67; in the Bantu females it is 78.5; in the females of this group 81.3 and in the males 81.9. There is no essential difference between Boskop (81.3) and Bush (80.1) types in this index save that the Boskop tends to be the higher and so to present the more primitive type of pelvis in this relationship. If then the Boskop and Bush races are responsible for those pelves which occupy the higher portions of this indicial range, it is obvious that those occupying the lower portion of the range are of alien and even European type.

In the Bantu females this index ranged from 60 to 90 and the curve of distribution gave a double peak due to two types of pelvis; one slightly longer and narrower than the European pelvis gave a peak at 73-77; the other much more elongated gave a peak at 81-85. In our group we find three subgroups peaking at 76-78, 80-82, and 83-85 and it is tempting to suggest that they are due to alien Bush and Boskop influences respectively. Much more knowledge of pelvic types and study of the distribution, not only in Africa but also elsewhere, is required before this can be definitely concluded; at most it is highly probable from the facts already adduced.

As in the previous index, so in the intercristal bitrochanteric index, we see the small divergence of the Boskop from the Bush mean, but the wide range indicates foreign admixture. As the low mean values given by Martin for this index are found in African peoples and the higher values in European and chiefly in Asian peoples, values of 90 and over must have their source outside Africa. But once again, until the necessary norms have been established we can only direct attention to the future probability of securing further evidence in the trunk and pelvis as in the head and face of racially diagnostic value.

9. SKIN COLOUR

This was tested by means of von Luschan's table on both the left arm and left cheek. In general the face registered a colour index a couple of degrees lighter than that of the arm. Schapera (loc. cit.) says "In the Southern Bushmen the skin colour varies from light-yellow to brownish

yellow. In the tribes just north of the Molopo some families are of the same colour, while others have darker tinges of varying shades—a patently new mixture. The *Auen*, *Naron* and *Kung* have a fairly constant reddish brown colour, although individuals incline more to yellow or to black."

The colour of the !ku Bushmen of Central Angola, according to Miss Bleek (loc. cit.) varies from dingy yellow to yellowish-black, almost copper coloured.

According to Seiner (loc. cit) in his series the skin colouration (von Luschan's Table) was as follows:—

Males		Females
70 !Kung principally	No. 23 18 !Kung principally	No. 23
8 // Ogowe ,,	No. 23 1 Hei//kum ,,	No. 23, 24, 25
15 Hei//kum ,,	No. 23 & 25.	
93	No. 23 19	No. 23

In our series there were four principal grades of colour shown on the; arm, seven (or 9.9%) belonged to the index 6, which is a brownish-yellow thirty (or 38.9%) belonged to the indices 17 and 18 which are a slight reddish-brown; seventeen (or 23.1%) belonged to the indices 22 and 23 which are a deeper copper-brown; eleven (or 14.2%) belong to index 27 which is a dark reddish-brown, almost black. The remaining twelve are scattered around these four main categories of skin colouration.

Facially there is more scattering and less consistent grouping of skin types. We find here that twenty (or nearly 26%) fall into the brownish-yellow (or index 6) group and thirty-seven (or 48.7%) form a cluster whose apex is at index 16. The remainder fall into two further clusters, one of twelve individuals with an apex at index 22 and another of eight individuals with an apex at index 25. This clustering of individuals around four given colour indices is of racial significance. We know that Mongolian blood is present in the group and the yellowish (index 6) group are logically referred to that influence. The pinkish and light reddish-brown (indices 16-18) colouration seems to be due to hybridisation with a light-skinned race probably Brown (Mediterranean). The original Bush type was presumably darker in colour and, if the clusters in the vicinity of indices 22-23 and 25-27 are to be interpreted racially, they probably come closer to the original of the Bush and Boskop colourations respectively than do the light-skinned clusters already

mentioned. At birth, children are customarily more reddish and lighterhued. So usual is this that adults refer to their early babyhood as the time "when they were still red."

SEE HISTOGRAM 7

In their investigations of Bantu women Orford and Wells (loc. cit) found that the majority of the Negro facial types had a skin colour of 28 or 29 while those with a Bush facies had their principal peak at 25. That so small a proportion of our group fall into the 28-29 category so prevalent in the Bantu, demonstrates along another avenue its relative freedom from Negroid admixture; none fall into categories 30-33 inclusive, which are so characteristic of the really Black Negro. Our Bush group, on the other hand, shows two categories, the brownish-yellow (clustering at index 6) and the light reddish-brown (clustering at indices 16 or 17) which are entirely unrepresented in the Bantu, even when infiltrated with Bush characteristics. The third or deep copper-brown category (clustering at indices 22-23), frequent enough in the Bush group, is rarely found in the Bantu group; even then it usually occurs only in Bush facial types.

If, as suggested, the copper-brown (index 22-23) is the Bush type and the dark-reddish (almost black) brown (index 25-27) is the Boskop type of skin colouration, the veering of the colour towards the upper ranges (on admixture with the Negro) to form the Bantu and towards the lower ranges (on admixture with the Brown and Yellow stocks) to form our modern representatives of the Bush race would be satisfactorily explained. Further, if their racial skin colour is accurately determined, they are shown to be less primitive than the Negro in terms of skin colour and more closely related in that feature to the Brown, Yellow and Whiteskinned races of mankind.

A feature generally recognised as symbolising mongoloid influence is the sacral spot or so-called "tache mongolique." Three infant females viz:—Nos. 3, 34 and 50 revealed this feature and on our calling attention to the phenomenon the older women stated that it frequently occurred on the children and disappeared in later life. Various grown individuals in the group were cited as having had them in babyhood though they now showed no trace of the spot.

The "tache mongolique" in all cases was on the dorsum, it was small in No. $34 \ \bigcirc mamakas$, but in No. $3 \ \bigcirc koro$ covers three-quarters of left and right buttocks. Its colour corresponds with 17 of scale (contrasting with rest, which is 22) with bluish tint. In No. $50 \ \bigcirc kata$ it is found in the form of twelve spots scattered over the thoraco-lumbar region, each spot $\frac{1}{2}-1$ in. in diameter and bluish in colour (compare Plate 68).

10. EYE COLOUR

The group also shows a considerable range of variation in the pigmentation of the iris. Utilising the range drawn up by R. Martin (loc. cit, Bd. 1.218) it was found that twelve (or 15.6%) were black brown, i.e. index 1; twenty-two (or 28,4%) were a dark brown, i.e. index 2; twentyeight (or 36.4%) were still lighter, i.e. index 3. One individual was too restless to examine, six were intermediate between index 1 and 2, three were intermediate between 3 and 4. Finally three individuals (or 3.9%) were so light-brown as to fall in index 4.

These facts can also be explained only by postulating admixture of the group with some more lightly pigmented iris-type than occurs in Southern Africa. In the large number of thirty-six individuals with eyes lighter than index 2 (i.e. 44% of this group) we again recognise the influence of the Brown race and possibly the Yellow race in modifying the ancestral iris pattern of the Bush and Boskop peoples, which were probably dark-brown and black-brown respectively.

SEE HISTOGRAM 8

The conjunctiva also varies greatly in its degree of pigmentation. The following numerically indicated terms were used to express the colours seen; the numbers in brackets indicate the number of individuals so described :-

- 1. Brown (nil) This group can be re-arranged thus:-
- 2. Dirty Brown (6) } -1. Dirty brown (8) or 10.7%
- 3. Brownish white (2) 4. Dirty white (32)
- \ -2. Dirty white (34) or 45.3% 5. Grevish white (1)
- 6. Blue-ish white (1)
- Yellowish white (20) $\left\{ -3. \text{ Yellowish white (22) or } 29.3\% \right\}$
- 8. Creamy white (2)
- } -4. White (11) or 14.7%. Pinky white (4) 10. White (7)

We can thus see, how the conjunctiva reinforces the evidence of the iris in indicating, that there are at least four different racial groups represented. Whether we are to assume therefrom that they are respectively Boskop, Bush, Mongolian and Brown pigmentary types; or alternatively, that the individuals in these groups are those demonstrating

the closest affinity with these races in terms of pigment, I am not prepared to say; but the facts of skin-colour corroborate those of eye-colour in revealing the affiliation of the Bush and Boskop races with the Brown race rather than with the Negro race in terms of pigment.

If we compare conjunctival colour with facial type we find that the Boskop types are, on the whole, darker than the Bush types although actually more Bush than Boskop facial types fall into the first or dirty-brown catagory. The largest number of yellowish conjunctivae occur amongst the Bush-Mongoloids, but they are not in any way restricted to this group.

Special attention was given to the occurrence of Mongolian folds. In our field notes records were made for its (1) absence, (2) slight fold in either eye, (3) definite fold in either eye, (4) definite fold in both eyes. Our figures show that it was absent in the preponderating number, i.e. forty-one (or 53.2%) of cases, present as a slight fold in one eye in twenty (or 25.9%), as a definite fold in one eye in twelve (or 15.6%), and as a definite fold in both eyes in four (or 5.3%).

The presence of mongolian folds, of yellowish-white conjunctivae, of yellowish-brown skin colouration and of taches mongoliques in such considerable proportions of a Bush population living in the Kalahari desert, for as long as tribal memory carries them back, provide collectively indications of the extent, to which Asiatics impinged on the Bush-Boskop population of Southern Africa, prior to the arrival of the Negro.

11. HAIR DISTRIBUTION

The distribution of hair upon the body was carefully examined. In twenty-three of the thirty young children and in nineteen out of the forty-seven older children and adults (both male and female) the body was completely hairless save for the scalp and face. The hair distribution upon the armpits, pubic region, trunk, arms and legs was classified according as to whether it was absent, very scanty, scanty, moderate or rich. In no case whatever was there a rich distribution of hair even in the armpits or over the pubes. In the vast majority (50-75%) it was absent on trunk, arms and legs; there was a scanty distribution of hairlets on these parts in about 25%. Relative to the armpits and pubes only one individual, namely No. 19 & witteman could be classified as having a moderate distribution of hair.

Hair was absent, very scantily or scantily present on these parts in about equal proportions (i.e. 33%) of the adults. We can therefore

regard both the Bush and the Boskop peoples (save for their peppercorn scalps) as an extremely scantily haired type verging on *hairlessness*. It is probable that body hair, when present, is due to hybridisation with other races,

The scalp hair was black in colour in all save fourteen adults where it was interspersed with grey and in No. $8 \ \$ lena, the Bush-European hybrid who had curly woolly brownish-black hair. Of the seventy-seven individuals sixty (or 78%) have pepper-corn hair; of these sixty there are forty-three (or 71.1%) whose pepper-corn distribution is coarse in type. Seventeen (or 22%) have woolly hair. More detailed work will require to be done to determine the differences between the Boskop and Bush types in respect of hair. Both have the pepper-corn type and are thus tuft-haired (Lophocomi) as opposed to fleecy-haired (Ericomi) varieties of the woolly-haired (Ulotriches) peoples. The Boskop type appears to be more coarsely distributed and to have a looser sort of pepper-corn tuft but my details are not sufficient for finality. Woolliness and abundance of hair is due to foreign admixture, but also need more investigation to determine the extent on a mathematical basis (Compare Plates 85-92 inclusive).

The distribution of the scalp hair is usually of such a nature that it looks like a skull-cap fitted on the head. Out of the seventy-seven, some forty-nine (or 63.6%) had this "skull-cap" type of distribution. Fifteen (or 19.5%) have a rounded projection of this skull cap invading the mid-region of the forehead; in four (or 5.2%) more this frontal projection is pointed at its anterior extremity. Eight (or 10.4%) have the "skull-cap" form invaded by a bitemporal recessing of the hairless area. Finally one (or 1.3%) shows a bi-temporal advancing of the hair-covered area. The significance of these divergent arrangements of the scalp hair is not absolutely clear. They are merely recorded in the event of their possible future usefulness as racial criteria. The rounded or even pointed projection or mid-frontal prolongation of the hair cap seems to be pretty closely associated with the Boskop form of head especially when it is trigonocephalic.

The eyebrows were classified as coarse, medium and fine. Out of seventy-seven, there were thirty-nine (or 50.6%) in the coarse, thirty-one (or 40.3%) in the medium and seven (or 9.1%) in the fine category. Most of those classified as medium or fine are children, a few are adult females but only two are adult males. Similar remarks apply to the eyelashes; out of seventy-seven there were forty-eight (or 62.3%) coarse, twenty-seven (or 35.1%) medium and two (or 2.6%) fine. They were

also classified as short; medium or long and out of the seventy-seven the records show a division into thirty-six (or 46.8%) with long and forty-one (or 53.2%) with short eyelashes. There is no correlation of length with age or sex but it often occurred that sisters or parents and children had the same type of eyelashes.

Of the twenty adult males none show a well-developed moustache or beard. The former is represented usually by a few sparse bristly hairs scattered over $\frac{1}{4}$ to $\frac{3}{4}$ of the upper lip. Actually there were five individuals where they were dispersed over $\frac{1}{4}$, six over $\frac{1}{2}$ and seven over $\frac{3}{4}$ and one over the whole of the upper lip. In one individual the beard hairs were scattered over $\frac{1}{3}$ the lower jaw area; in one over $\frac{1}{4}$ the area; five showed no beard whatever; the majority, i.e. thirteen showed a beard consisting of a tuft of little hair in the central part of the lower lip and two similar little tufts of down on each side of the chin.

It was found more useful than the collection of these quasi-mathematical data to symbolise by a letter the racial type of hair distribution in the moustache and the beard of the various subjects thus :- A=Armenoid, M=Mediterranean, Mo=Mongoloid, Bo=Boskop. Personally I doubt whether the pure Bushman had any moustache or beard whatsoever, and the only individual having so divergent a type from the others that it might be looked upon as distinctive was No. 44 /alo pwa II, (see Plate 89). Since simultaneously he possessed the nearest approximation to the ideal of a Boskopoid face, his moustache and beard (consisting of a scattering of hairlets around the upper and lower lips with nothing whatever on the chin or around the angles of the mouth) has been dubbed Boskopoid. For the rest of the males the sparse provision of facial hair is distributed in fashions characteristic of the three races already mentioned in such a way that four or 25% viz:—No. 4 abraham, No. 16 \(\neq ubeiku II\), No. 37 !kuribe and No. 73 /unuu had an Armenoid; eight or 50% viz: | alakap, No. 75 koos, No. 76 maarman and No. 77 ari II had a Mediterranean and four or 25% viz:-No. 1 malxas, No. 14 !heixa, No. 19 witteman and No. 61 uye followed the Mongolian type of distribution (see Plates 89-92 inclusive).

12. BODILY POSTURE AND STEATOPYGY

Both males and females are characterised by a marked anterior displacement of the spine from the sacral region upwards. The pelvis has failed, as it were, to rotate backwards and upwards on the femora and maintains the body in a posture which for Europeans, is infantile in type and for which I am employing the term "proptosis." The abdomen is thrown forward and protuberant, but the thorax develops little, if any, compensatory (posterior) kyphosis so that the vertebral column seems to rise vertically over the anterior part of the pelvis, or even slopes forwards in standing upright. The buttocks thus appear unduly prominent behind. The head is carried well forward over the chest, instead of vertically over the trunk. The forwardly-displaced attitude or "proptosis" of the body accentuates its appearance of senility in middle life (vide Plates 69-80 inclusive).

Many investigations of the foot (Wells 1931), pelvis (Orford 1934), vertebral column (Laing and Gear 1929), etc., have demonstrated the primitive or Neanderthaloid features traceable in the Bushman type. In no aspect of their structure are these features more apparent than in their proptotic posture whether standing, dancing, running or using a weapon (Plates 77, 93 etc.). They are incompletely erect. In standing, extension of the legs is usually incomplete, and the body is characteristically tilted forward; this is still more marked in any form of bodily activity, as can be seen in all photographs of dancing, hunting, etc. Both children and adults spontaneously and readily follow games that cultivate quadrupedal activities which their posture favours: such as the imitation of frogs, baboons, buck and all manner of four-footed animals. They creep and caper on all fours with agility: the crouched posture is assumed automatically not only in their games and dancing, but also in their shooting with the bow and their stalking of game. In the same way they squat, doubled up over their fires; sleep curled up in foetal posture and stoop with curved back over their making of bows and arrows or bead necklaces.

This constitutional proptosis of the spinal column in Bushmen has not escaped the attention of previous investigators, who refer to it incorrectly as a lumbar curvature; it is frequently emphasised in the Bushman's own paintings. The implications of the proptotic condition of the spine physically for the rest of the skeleton and body and functionally for the every-day life of the Bushman has not been appreciated. It seems to characterise equally both Bush and Boskop types.

A proper understanding of bodily posture in the Bushman is an essential preliminary to the discussion of steatopygia. The prominence of the buttocks in Bush and Hottentot women has always attracted attention and has generally been regarded as due to an excessive fatty deposit in that region. Considerable discussion has also centred around its diagnostic value as a racial characteristic. It is generally regarded as more typical of "Hottentot" than of Bush women and, when present,

has been regarded as evidence of "Hottentot" admixture (see Plates 75, 76, 80, 93, 94.)

There are several factors that account for the so-called steatopygia. Firstly the Bushman is not usually well-supplied with fat and any localised deposit of fat would become obvious wherever situated on the body. Secondly the fat, when it is deposited seems to be chiefly confined to the lower abdomen, the buttocks and the thighs. It is regional in distribution instead of being generalised all over the body; the regions occupied by fat are those where the more massive accumulations occur in European children or in the infantiloid subjects of fatty dystrophy. The distribution of fat is therefore infantile in type. Finally the distribution is of such a nature as to emphasise the proptotic posture; or alternatively the proptotic posture emphasises the appearance of steatopygia. In specific cases, where the projection was assessed, as recommended by Drury and Drennan (1926), by measuring the distance between the apex of the lumbar curvature and the vertical stature rod (the latter being in contact with the most posteriorly projecting point of the buttock), it was found that no less than 3.0 cm. depth of the projection was, as we may express it, "osseous." In a steatopygia of 8.0 cm. depth, therefore, only 5.0 cm. of the projected part behind the column could be regarded as truly adipose. A female infant of two months age (No. 3) measured 5.5 cm.; her mother (No. 2) 10.75 cm.; her grandfather (No. 4) 6.5 cm.; her five year old female cousin (No. 9) 5.0 cm.; another nine year old cousin (No. 8 Bush-European) 5.5 cm. (Compare Plates 93 and 94). The average measurement for twenty-two adult males is 5.9 cm. and for twenty adult females 9.6 cm. The greatest projection occurred in three women all of whom showed a depth of 14.0 cm. One male attained in depth the average for the females and the difference between the averages for the two sexes, i.e. 3.7 cm. would be equalled or surpassed in Europeans and Bantu. The greatest depth recorded by Drennan and Drury, viz. 15.0 cm. (i.e. 6 in.) was not quite equalled in this series.

Steatopygia is an expression of constitutional infantilism in posture (vertebral proptosis) and fat distribution. It is found in both sexes and is not due to a real but merely to an apparent and curiously localised excess of fat. In these features of fat distribution and posture the Bushmen presents pedomorphism comparable with that of his skull.

These facts accord with and assist in explaining Drennan's (1930) remarks that the index of the Bushman lumbar curve lies in the simian direction, that as in the Simidae there is no adaptation of the bones of the lumbar or thoracic region to form curves, that the sacrum is sometimes

extremely simian in its proportions and that the pelvis is more ape-like than that of any other living race. In referring therefore to the posture of the Bushman, I have termed it *proptosis* or forward falling and carefully avoided the use of the terms "lordosis," "inward curvature," etc. which are inapplicable to the condition and fail to draw attention to the real significance of the primitive, imperfectly erect posture of the Bushman body.

Drury and Drennan (loc. cit.) have classified steatopygia as it occurs in South African woman into three types. In type No. 1 the buttocks are "angulated" postero-superiorly; in type No. 2 there is no angulation but a posteriorly flattened or "pancake" type of buttocks; in type No. 3 the buttocks are smoothly and regularly rounded as in the average European. Both of the former types, which I have dubbed angulated and pancake respectively, are associated with the proptotic condition and it seems probable that the more pronounced the proptosis the more angulated is the form of the buttock (see Plate 75).

About the beginning of the 19th century, Governor Janssens, an acute observer of the yellow races of the Cape, noted that men as well as women showed steatopygy, though to a less obvious degree (Johannes Muller 1834). That steatopygy is an expression of infantilism in posture and fat distribution, is corroborated by the recurrence in the males of the three types of buttock found in females. Thus in my field notes I record ten males as belonging to the 3rd or European type. We can identify within each type a female, an infantile female and a male variety of that type. In the male variety of the first type, apart from the tendency to angulation, the buttocks show 2, 3, 4 and even 5 gluteal folds instead of the single fold present in Europeans (see Plates 70-74 inclusive).

Out of sixty-eight individuals in this group thirty-four (or 50.0%) belonged to the 1st type, nine (or 13.2%) belonged to the 2nd type, and twenty-five (or 36.8%) to the 3rd type. Of each of these "steatopygal" types three grades were detected, viz., the adult or "fully-developed female" grade, the infantile or "partially-developed female" grade and the "adult male" grade. Of the thirty-four belonging to the 1st type, fourteen females showed the "adult female" grade; seven females and six males the "infantile female" grade; seven males the "adult male"; grade. Of the nine belonging to the 2nd type four females showed the "adult female" grade; two females and two males the "infantile female"; one male the "adult male" grade. Of the twenty-five belonging to the 3rd type, three females and one male showed the "adult female" grade, four female children and ten males the "infantile female" grade and seven males the "adult male" grade."

To determine the possible racial significance of steatopygia it is best to restrict ourselves to the females of the group, where the condition is most obvious. Of the eight females most nearly approaching the Boskop type in head and face characters (viz.—Nos. 29, 33, 38, 39, 48, 52, 58 and 70) all but one were of the 1st type. Of the remaining seventeen of preponderantly Bush type in head and face characters (viz.—Nos. 2, 5, 6, 7, 10, 15, 18, 21, 23, 30, 45, 49, 51, 54, 55, 62, 64) nine were of the 1st type, four were of the 2nd type and three were of the 3rd type. We may assume from these facts that the 1st or "angulated" or "marked" type of steatopygia is a Boskop feature and that it is dominant over the 2nd and 3rd types of steatopygia in a racial mixture such as we are considering.

The 2nd or "pancake" variety of steatopgia would seem by exclusion to be the true Bush type. It does not tend to emerge in truly Boskop women. In this connection too it should be noted that, while no special attention has been paid to the typology of steatopygia amongst the Pygmies, Schebesta and Lebzelter (loc. cit.) record that it is present in slight degree. Further such of their pictures as portray females in lateral view, indicate the type of steatopygia they possess to be that which we term the second or "pancake" type.

With respect to the 3rd type, we assume that it is characteristic of the European and Oriental races until further investigation demonstrates otherwise.

In Bantu females Orford and Wells (loc. cit.) found steatopygy present in only 27.5%; in approximately half the cases it was "marked" and in the other half "slight." Practically 70% of the cases of steatopygia, whether slight or marked, occurred in Bantu women of Bush facies. As they pointed out, this Bush group contained a series of long-headed Boskopoid individuals. Of these eighteen "Bush" individuals thirteen had a head-length varying between 175 and 188 mms. while five varied from 193-209 mms.; all save one of these longer-headed individuals had "marked" steatopygia. The short-headed individuals comprised five in whom steatopygia was absent, five where it was slight and three only where it was marked. These facts corroborate the view that marked, angulated or 1st type steatopygia is a Boskop feature and that slight, pancake or 2nd type steatopygia is a Bush feature.

13. EXTERNAL GENITALIA

The penis lengthens from 3-5 cm. between the first and tenth year of life; it increases to 7-9 cm. during puberty. Amongst nineteen males who had passed puberty, five had a penile length of 7 cm., eight a length of 8 cm. and six a length of 9 cm.

A phimotic condition of the prepuce was noted in fourteen male children. There was no evidence of circumcision or any other operative procedure on the genitalia in males or females. In sixteen individuals, only five of whom were above puberty, the penis could be described as horizontal in position (in one child it was concave upwards); in seven others, three of whom were children, it pointed diagonally downwards; in twelve others, only one of whom was a child, it was flaccid. Many of these were old men; they all had a Boskop facies and it was probable that previously some had been at least diagonal in orientation. Only four individuals (one of them being the child with the upwardly-curved penis) had a slack bag-like scrotum: in all the others it was tight and contracted (see Plates 73 and 74).

Of the seventeen horizontal types eleven were in Bush facial types and (as there were only twelve predominantly Bush facial types amongst the males) this close correlation can scarcely be fortuitous. Only one drooping or diagonal and no flaccid forms emerge in Bush facial types; all but one of the seven diagonal types are Boskopoid. The most frequent amongst the Boskop facial types is the flaccid variety. Of these there are twelve specimens. If we allow for flaccidity with extreme age and as a feature of alien races, it seems probable that the diagonal type is a true type and is characteristic of the Boskop race. It occurs in No. 44 |alo@pwa II the purest facial representative of this type (see Plate 73).

In young children the testes are scarcely noticeable, but on palpation can be found alongside the base of the penis, i.e. in a partially descended position; later they move half way down the scrotum, but even when the testes are fully descended, enlarged and of adult size, they characteristically occupy the whole of the small non-pendulous scrotal sac just below the penis.

Seiner (loc. cit.) found a horizontal projection of the penis in about three-fifths of the men he examined in the Northern Bushmen. This physical peculiarity was known to the old colonists (Peringuey 1911), who thought that the purity of the race was denoted by the angle at which the organ stood normally. Commenting on the short, projected and semi-erect attitude of the penis found in all Bushmen and Hottentots examined by Drury, he and Drennan (loc. cit.) say "It is difficult to account for this formation of the external genitals of the Bushman, unless it is regarded as a persistence of an infantile condition of these parts, an explanation which accounts to a certain extent for the enlargement of the labia in the female."

If we accept the infantile or horizontal type as the true Bush type and the diagonal type as the true Boskopoid, neither can be confused with the pendulous and long Negroid type. The flaccid scrotum and flaccid penis, which can occur in both children and adults and cannot be explained in terms of growth changes, must indicate admixture of the Bush type with races where these features are characteristic. The Negro is excluded because only one male with negroid facial features could be found and his penis is of the Bush horizontal type. Of the eleven Boskopoids with flaccid penis four (4) were Armenoid, three (3) were Mongolian, three (3) were Bush and one (1) was Mediterranean in secondary facial type.

Drury and Drennan (loc. cit.) describe two types of *labia minora*, the "butterfly" type found in the *Naron* and *Auen* women of Sandfontein, South West Africa, and the "wattle" type found in the Cape Bushwomen and the *Masarwa* of Bechuanaland. At Prieska examples of both types were found, "suggesting meeting of the races of the Kalahari and the Cape."

In our group these divergent types of labia were found and variants were also discovered in a "reversed wattle" (No. 70 tatabesa) type where the thickened and lengthened border of the triangular web was posterior instead of anterior in situation and in two instances of a "reversed butterfly." (No. 10 thobaku and No. 62 /abes) arrangement where the finger-like pendant from the web was also posterior instead of anterior. Curiously enough the "reversed wattle" type was pictured for a "Hottentot" female in one of Schultze's (loc. cit.) photographs, as is also the true" butterfly "type, although he does not discriminate between them in Drennan and Drury's sense.

Out of our twenty-six females, who were sufficiently near to adult age to diagnose with certitude, the nine Boskopoid ones embraced two with "butterfly "labia, five with the "wattle "type, one being "reversed"; and two with the "European" type; the seventeen Bush individuals included five with "butterfly" labia, seven with the "wattle" type and five with the "European" type (see Plate 94).

Having had the advantage of seeing Orford and Wells' data I am able to report that the four of the five Boskopoid Bantu females, who had marked steatopgia, had "butterfly" labia; the remaining one having no steatopygia and "European" labia. The thirteen Bantu females with short Bush heads and Bush facies embraced twelve with "butterfly" labia and one with "European" labia. Only four females of their series of fifty-nine showed "wattle" labia and they were of Negro or Mongol facies.

It appears from these Bantu female figures that the "wattle" type of labia is recessive in the presence of Negro-Bushman admixture and the "butterfly" type preponderates numerically; although there is nothing to indicate that Negro labia have a form divergent from that of Europeans. On the other hand, in our Bushman group, unaffected by Negro admixture the "wattle" type is strong numerically and even predominates over the "butterfly" type when the Bush facial characters predominate.

If the facts are interpreted correctly up to this stage in our enquiry we are at the interesting stage of claiming that the angulated type of steatopygia and butterfly labia are Boskop characteristics but that, in hybridisation, they do not necessarily accompany one another as inherited characters. Similarly the pancake type of steatopygia and wattle labia are Bush characteristics, that do not accompany one another genetically. Further investigation will be necessary to resolve the manner in which they are transmitted but the indications are that, in the Bush-Boskop cross, the angulated type of steatopygia and the wattle form of labia vie for pre-eminence but that, in the Bush-Boskop-Negro cross the angulated type of steatopygia and the butterfly form of labia are more potent genetically than the pancake type of steatopygia and the wattle form of labia.

There is no question but that the lengthening of the labia occurs during puberty because it is absent in female infants and increases correspondingly with age to womanhood. All insisted that the growth was a natural phenomenon—statements supported by the absence of any indications of ritual, surgical interference with the genitalia in either sex and corroborated by the discovery of the reversals of type mentioned. It is further corroborated by the fact that No. 5 /khanako had labia of the "wattle" type and that this type was inherited by two of her daughters (Nos. 6 and 7), while No. 8 lena the half-caste European daughter has the European type of labia and the oldest daughter by a "Bushman" father (No. 51 /keri/keri) has labia of the "butterfly" type.

In respect of actual length, wattle types attained 7 cm., i.e. nearly 3 inches, the longest were of butterfly type and measured 9 cm. i.e. slightly over $3\frac{1}{2}$ inches; the commonest lengths in both types were over half of this figure, namely 4 or 5 cm. Further it was noted that as much as 3 cm. difference increase could occur in measurements taken in the squatting as compared with those taken first in the standing position. Whether this was due to stimulation and subsequent engorgement we are unable to say; it is possible. In all cases the minimal measurement was the one recorded and the custom followed was to measure as rapidly as possibly in the standing position with the legs separated.

Six (i.e. 23%) of the female adults presented labia indistinguishable from those of Europeans and Asiatics; if, as seems likely, labial form is racially diagnostic, such types corroborate the extent of racial admixture. Racial admixture may also account for the reduced length of labia found in a large number of the women.

14. MAMMAE

The breasts and their areolae vary greatly in form and appearance from sphaeroid big-breasted (13.7 x 14.2 cm.) and small circular-areolar (2.6 x 3.0 cm.) types like No. 39 !kamku II (Plate 61) to conoid, small-breasted (8.75 x 8.0 cm.) and large globoid-areolar (5.0 x 5.0 cm.) types like No. 5 klein |khanako (Plate 86 etc.). Contrasting with these two are the pendulous elliptical types (12.5 x 9.5 cm.) with huge dark elliptical areolae (8.25 x 7.0 cm.) as exhibited by No. 21 mamas (Plate 58).

The first or sphaeroid type is indistinguishable from that of the European woman in form and is present in six out of twenty-seven or 22.2%, i.e. No. 5 /khanako, No. 7 marta, No. 39 /kamku II, No. 55 lys, No. 62 /abes, No. 64 khoitamas; the second or conoid is the most frequent and is found in eleven or 40.8%, i.e. No. 6 klein /khanako, No. 8 lena, No. 29 haki, No. 30 ou tsamas, No. 33 /ues, No. 38 /kx un/i, No. 45 /kxube, No. 49 /kawi II, No. 52 //kobe, No. 58 \neq abaitu, No. 70 tatabesa; the third or ellipitical and pendulous type is encountered in ten or 37.0% of the females who are sufficiently old to allow of an expression of opinion, i.e. No. 2 /kweike, No. 10 thobaku, No. 15 /kai/ko, No. 18 /am \neq ari, No. 21 mamas, No. 23 \neq gauke, No. 48 /kuruke, No. 51 /keri/keri, No. 52 //kobe and No. 54 suxuu VI. It is tempting to regard these three types also as racial stigmata and to interpret them as Mediterranean, Boskop and Bush respectively (see Plates 75, 76, 77 to 88, etc.).

It is noteworthy that /khanako's sphaeroid breast type recurs in marta (Plates 79 to 80), but her other three daughters are different, /keri/keri (Plate 81) having the pendulous and klein /khanako and lena having the conoid type; the sisters haki and ou tsamas have the same conoid type (although that of the latter tends towards the pendulous type) as do also another pair of sisters !kx un/i and //kobe (Plate 94). Again !kamku II diverges strongly in type from her mother !kx un/i. These facts go to show the genetic distinctiveness of some breast and areolar forms; more detailed investigations over a larger number of individuals would doubtless allow us to see how they are inherited.

Out of eight preponderantly Boskop facial types five have the conoid type of breast. Six further conoid types emerge in the eighteen Bush

facial types, two of whom have Boskopoid features in the second degree and three of whom have Boskopoid features in the third degree. The conoid type of breast with a globoid areola thus appears to be a Boskop feature.

The pendulous type of breast with an expansive non-elevated areola is the most frequent in the group of Bush facies and it occurs in No. 18 $|am \neq ari|$ the purest Bush type amongst the adult women. The numbers are too slender to determine the matter finally but the sphaeroid type of breast with a small areola is not common in the group and more closely approximates the Mediterranean and Oriental breast type. We may therefore argue by a process of exclusion that the Bush type of breast is pendulous and has an expansive non-elevated areola.

15. CONCLUSIONS

A genealogically-investigated group of Bushmen has been measured and their non-metrical cephalic features recorded. By inspection and general consideration of non-metrical features we divided this consanguineous group of Bushmen into two main categories of head-form. We submitted this primary classification to the critical test of head-measurement and thereby cross-checked and corroborated the original classification.

The facial constitution of each member of the group was then determined independently and checked by consultation with colleagues assisted by facial masks, photographs and facial measurements. A table of correlation between cephalic and facial characteristics demonstrated that facial form was not necessarily correlated with head-form but that each is transmitted genetically according to the law of averages.

Both in the head and in the face evidence was discovered of alien admixture with the fundamental Bush and Boskop African stocks, which constitute the Bushman and Hottentot peoples of to-day. This alien admixture was principally evidenced by facial characteristics, by variations in the colour of the skin, iris and conjunctiva, by variations in the character and distribution of the hair and by variations in steatopygia and the organs of sex. It was corroborated by alterations from the characteristic South African racial norms in cephalic form and indices, bodily habitus and pelvic form. The alien admixture was shown to be principally Brown (or Mediterranean or Hamitic) but in addition Mongolian and Armenoid and only to a minimal extent Negro.

The correlational analysis of head and face revealed an unexpected genetic linkage of race and sex. The linkage of the Boskop type to the

male sex and the Bush type to the female sex is outstanding; there is also evidence of the linkage of the gerontomorphic Armenoid with the Boskop type to the male sex and of the linkage of the pedomorphic Mediterranean and Mongolian with the Bush type to the female sex.

By means of these analyses the living Bushmen were proven, contrary to our expectations, a mixture in virtually equivalent parts of two South African racial stocks: Bush and Boskop, the alien elements being superimposed, as additional elements upon this doubly-pedimented racial foundation. The only further detected racial addenda to this simple macedoine were a few vestigial traces of Australoid ingredients.

This neatly-balanced racial mixture has provided us with the opportunity of setting on record a preliminary comparative account of the two contrasting types of face and body form: Bush and Boskop found in South Africa, of presenting evidence for the persistence of the Boskop type amongst the Pygmies and Southern Bantu as well as amongst Bushmen, of demonstrating the close physical relationship between the Bush race and the Pygmies of Central Africa and of indicating the common heritage and therefore common origin of the Bush-Pygmy and the Boskop stocks from a common ancestry. It has incidentally shown that these stocks are more closely related to the Brown or Mediterranean race than the Negro race in head form and pigmentation of the body.

Summing up we have learned from this study that this group of Bushmen are very mixed anatomically, but that within it we can isolate, despite their hybridisation with other human stirps, the fundamental features of the Bush and the Boskop types. Their divergent bodily characteristics will become more accurately known with further investigation and are tentatively described as follows:—

	Bush.	Boskop
Head	Short acute pentagonoid. Dolichocephalic verging on mesaticephalic (average 178.5 x 137.2 mm.).	Long acute pentagonoid. Dolichocephalic verging on ultra-dolichocephalic (average 193.2 x 147.9 mm.).
Face	Small smooth pentagonoid almost vertical in profile.	Large rugged pentagonoid proganthous in profile.
Forehead	Smooth and vertical, even projicient.	Rugged and somewhat retreating.
Eye ridges	Absent	Present but not salient.

	Bush.	Boskop.
Nose	Short, broad and low.	Fairly long, very broad and fairly elevated.
Infra-orbita region.	l Inflated	Full (but not inflated).
Oral region	Shapely, convex, not protruded beyond nose.	Muzzle-like, convex, protruded beyond nose.
Mouth	Small, not pursed.	Large, wide and strongly pursed.
Lips.	Full but shapely.	Wide, flaccid and transversely furrowed.
Lower jaw	Small & vertical in profile.	Massive and receding in profile.
Facial type	Pygmoid (or human foetal) type	Chimpanzoid (or muzzle-like) type
Ear	Square, non-lobulated.	Pyriform, non-lobulated.
Bodily Habitus	Hyposthenic verging on Sthenic	Sthenic.
Stature	Pygmoid: males 145-150 cm. females 135-140 cm.	Moderate: males 155-160 cm. females 150-155 cm.
Arms.	Short (average 63 cm.)	Long (average 72 cm.).
Legs	Short (average 88 cm. cristal, 76 cm. trochanteric)	Long (average: 96 cm. cristal, 83 cm. trochanteric).
Shoulders	Unexpanded (diameter 30 cm.)	Moderate (diameter 35 cm.)
Hips	Fairly broad relative to shoulders	Narrow relative to shoulders
Chest	Small, fairly deep, relatively wide.	Capacious, very deep and relatively narrow.
Pelvis	Small, narrow relative to length, spines more everted.	Massive, very narrow relative to length, spines more inverted.
Skin colour	Deep copper-brown (22-23)	Dark reddish brown (25-27).
Iris ,,	Dark brown.	Black brown.

Bush.

Boskop.

Conjunctiva Dirty white

Brownish white.

Colour.

Labia.

Hair Fine, discrete peppercorn,

Coarse scattered peppercorn, skull cap and frontal prolonga-Skull cap distribution.

tion.

Steatopygia Second, pancake or slight

First, angulated or marked type.

type.

Wattle type. Butterfly type.

Breasts. Long and pendulous. Short and conoid.

Areola.

Expansive and non-elevated. Large and globoid.

Penis. Horizontal. Diagonal.

Scrotum. Small and tight. Small and tight.

From this array of divergent somatic characteristics, it is clear that in dealing with a given South African population, whether Bushman or Hottentot in language and culture, we are faced principally with two contrasting body types; that one of these types is the small Bushman and that the other is a race rescued, as it were, from a remoter past of Africa preceding the Bushman. The fact that the two types are here to-day interwoven with one another in this intimate Mendelian fashion shows that the Boskop race did not give origin to the Bush race; but we can scarcely doubt, from the numerous features they hold in close relationship, that they are more akin to one another than either is to the Negro or to any other race of mankind and that they sprang from one common ancestral stock.

Despite the demonstrable physical divergences the racial correspondence between the Bush and Boskop types, evidenced by the mean indicial values in the head, face and various portions of the body, has proved to be so close that we must seriously confront one of two alternatives.

Either they constitute two racial entities so closely related that the classical indicial methods of enquiry fail to isolate them as two races but cause us to fall back upon absolute measurements and non-metrical features to separate the two racial types; or alternatively they are not two races at all but one race in which the Boskop type shows the male and the Bush type the female picture of the single South African race,

If they are not two races but only one race then the classical search for two physical types: Bush and Boskop (or "Hottentot") has been towards a mirage misleading laymen and scientists alike for the last century. Further if they are not two races the fossil Boskop skulls found at points ranging from the Cape to the Sahara are but masculine members of one race, whose feminine membership is typified by the Bush and Pygmy type of skull. Again, if they are not two races the long-headed skulls emerging in collections of Pygmy, Bantu or Bush people are not persistent traces of a pre-Bush African type. Equally they cannot be contributions of the short-headed Oriental races (Mongolian and Armenoid) or of the moderately long-headed Brown (or Mediterranean) race to Africa; in all these races the head is characteristically shorter than the Boskop type of head.

If, on the other hand, they are two races, the classical search on the living population has been justified; while the term "Hottentot" has proved a misnomer (both from the point of view of the prevalence of this physical type amongst Bushmen and also from the point of view of its prehistoric and, as far as knowledge goes, pre-Bush distribution in Africa), the Boskop race has been found to share equivalently with the Bush race in the formation of the Bushman and Hottentot population of South Africa. If they are two races, the absence of the Bush type from the lowest strata of our inland, coast and cave shelters, and the occurrence of Boskop and absence of Bush types there and in ancient gravels and other primaeval deposits becomes rational. If there are two races the small percentage of long-headed Boskop types found in Pygmy groups, the larger percentage (31.7)% of the same type in a Southern Bantu female group and the still larger percentage (approx. 50.0%) found in our Bush group are explicable as the remnants (in increasing proportion as we proceed southwards in Africa) of that genuine pre-Bush African type still living in our midst.

The merit of any one theory lies in its capacity to explain more of the facts than an opposing theory! The facts left unexplained in this instance by the uni-racial concept are so numerous at to leave the dual racial theory in possession of the field. If they were but one race this "Bush-Boskop" race would have betrayed a greater sexual divergence (from a microcephalic female to a macrocephalic male type) than is portrayed by any living race and that great divergence would have been traceable not only in the sexual apparatus but in every constituent part of the head and body (as it can be traced in this group) from infancy to senility; such facts would have entailed a complete re-casting of modern conceptions concerning racial types.

We need not resort to these heroic measures; we can rest assured they are two separate races of the human stock. The close relationship between the Bush and Pygmy and the existence of a few Bush males in our group shows that the Bush type was both male and female; just as the presence of a few Boskop males in Pygmy groups is evidence enough in itself for that type as a racial entity. Strikingly enough the male sex-linkage of the Boskop type is equally evident in Central Africa. Only one out of the twenty-seven long-headed "Boskop" Pygmies, previously mentioned, is female; the sex-linkage situation in Negro mixtures on the other hand cannot be assessed until we have ampler figures but it seems that long-heads (for reasons as yet inadequately analysed) can occur in the Bantu as readily amongst females as amongst males. The dual racial theory concerning the physical constitution of Bushmen (and simultaneously of Hottentots) thus aids us in understanding the still greater racial compexity of the Pygmy and Bantu peoples.

Finally this group, relatively unaffected by Negro admixture, reveals the physical nature of the pre-Bantu population of Southern and Eastern Africa. Thereby it demonstrates that the Bush-Boskop population of Africa was infiltrated by the Brown (or Mediterranean) race from Northern Africa and chained to the Armenoid and Mongolian races from Asia, not merely by links of commerce and culture but also by the more vital bonds of kindred and consanguinity, over an unknown period of time prior to the advent of the Negro in Eastern and Southern Africa.

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A final note should be made concerning Plates 73, 74, 75, 76 and 94, which, although mentioned in the text, could not for various reasons be printed along with the other illustrations at Lovedale. A limited number have been printed separately for attachment to reprints and can be secured by contributors or investigators, if they require them, on application to the Editor.

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LIST OF PLATES

PLATE 57

Tribe: ≠khomani

Family of abraham or !gurice,

son of /khano ka also called !gurice/xam or !nurta.

Back Row: No. 2 \, !kweike wife of malxas, No. 3 \, koro their daughter, No. 1 & malxas son of abraham and ou/khoro, No. 4 & abraham, No. 10 \(\text{thobaku} \) daughter of guni and second wife of abraham,

No. 13 ♀ their infant daughter //²amme.

Front Row: No. 11 & atsani son of thobaku and previous husband, No. 7 \(\text{marta} \) and No. 9 \(\text{kuskai} \) daughters of \(\lambda \text{khanako}, \text{No. } \text{\text{\$\text{V}}} \) /khanako daughter of abraham and ou/khoro, No. 6 2 klein /khanako and No. 8 \(\rightarrow lena daughters of /khanako, No. 12 & tsaman son of abraham and thobaku.

PLATE 58

Tribe: ?≠khomani

Family of //kabbe, son of kulkake,? cousin of abraham.

No. 21 ♀ mãmãs grand-daughter of the /²auni man tobe and /am≠ari, No. 19 & witteman son of tobe and neiki, No. 17 & //kabbe second husband of /am≠ari, No. 18 ♀ /am≠ari a Vaalpens woman, No. 20 ♂!kwoi/kan a grand-son of tobe and neiki.

PLATE 59

Tribe: /2auni Family of //am//na,

son of & tutai and //xaue, the wife of ourooi I.

No. 24 & klein-ourooi, No. 22 & //am//na, No. 25 & hokusa (or agusa), No. 23 $Q \neq gauke$, daughter of No. 44 /khano \otimes ka, cousin of abraham, No. 27 \(\text{klein suxuu} \) (in her arms), No. 26 \(\text{Voukoi} \). The children are the offspring of /|am|/na and $\neq gauke$.

PLATE 60

Tribe: ≠khomani

Family of //khaku, son of /goikam and first cousin of abraham.

Back Row: No. 30 ♀ ou tsamas daughter of & tobe and ♀ neiki, No. 31 ♀ n!ka daughter of ou tsamas, No. 29 ? haki sister of ou tsamas; No. 28 //khaku, No. 33 \(\rightarrow \) /ues daughter of //khaku and haki.

Front Row: No. 32 \(\rightarrow \) kweye daughter of ou tsamas, No. 34 \(\rightarrow \) mamakas and No. 35 \(\rightarrow \) !ka!kanu daughters of ||khaku and haki, No. 36 ||khaku III grandson of ||khaku.

PLATE 61

Tribe: /²auni
Family of !kuribe,

son of \(\neq\u00faber ubeiku\), cousin of oukhoro, the wife of abraham.

Back Row: No. 39 \(\times \)! kamku II, No. 37 \(\frac{1}{2} \)! kuribe, No. 38 \(\times \)! kx?un/i his wife, sister of \(\left(\lambda abbe, \text{No. 43 } \times \) ai/ai in her arms.

Front Row: No. 40 & tamtam, No. 41 & gom/korop, No. 42 & !kaap.

PLATE 62

Tribe: ≠khomani
Family of |alo ⊚pwā II,
brother of |/khaku and cousin of abraham.

No. 57 & hokusa, son of suxuu IV, a cousin of $|alo \odot pwa$ II and abraham, No. 44 $|alo \odot pwa$ II, No. 45 \bigcirc !kxube daughter of $|alo \odot pwa$ III and sister of $\neq gauke$, the wife of ||am|||na, No. 46 & $|alo \odot pwa$ III, her son by an unknown father.

PLATE 63

Tribe: $? \neq khomani$ Family of $\neq en$,

cousin of //kabbe and his sisters $/kx^2un/i$, wife of /kuribe and kobe, wife of $\neq ubeiku$.

PLATE 64

Tribe: /namasa Family of uye, son of ou!kiep.

Back Row: No. 61 & uye, No. 63 & jan, No. 64 ♀ khoitamas, No. 65 ♀ tsukoros, No. 62 ♀ /abes, a Vaalpens woman, wife of uye and an Australoid type.

Front Row: No. 66 3 //nwahu, No. 68 \Q /ubukes, No. 67 3 /an//ani.

All the children are grandchildren of uye and abes through one of their daughters, who was not present.

This family and the following one are placed under the $\neq \tilde{e}ikusi$ (or Vaalpens) in the genealogical table, because although the men claim $\neq khomani$ relationship their contacts seem closer with the people of their wives.

PLATE 65

Tribe: |namasa| Family of |alakap, son of uye.

No. 70 Q tatabesa a vaalpens woman, wife of /alakap, No. 71 3 madekap (in her arms) and No. 72 3 atap her sons, No. 69 3 /alakap her husband and father of the children, an Australoid type.

PLATE 66

Professor L. F. Maingard (left) and Professor I. D. MacCrone (right) with three Bush people not closely related to the others.

These are from left to right: No. $15 \circlearrowleft !kai/ko$ (or outanta) sister of $|am \neq ari|$, the wife of |lkabbe|, she was previously the wife of tibi tibi, abraham's cousin and ou/khoro's second cousin; No. $58 \circlearrowleft \neq abaitu$, sister of !kai/ko and $|am \neq ari|$; No. $14 \circlearrowleft !heixa$ (or platkop) second husband of $\neq odes$, daughter of $\neq ubeiku$.

See also Plate 56 for !heixa.

PLATE 67

No. 16 & ≠ubeiku II brother of !kuribe making an arrow; No. 54 ♀ suxuu VI his daughter by his second wife ||kobe; No. 59 & tsap or sasi⊙pwã son of No. 54.

PLATE 68

No. $3 \circ koro$ two month's old daughter of *malxas* held by Mr. Bain to show pale-coloured *tache monqolique* covering the buttocks. It is clearer on the right side. No. $5 \circ /khanako$ is standing nearby.

PLATE 69

Comparative full-face view of tall-statured men of advanced age to show their body habitus etc.

Left to right: No. 44 /alo⊙pwa II,

No. 47 ≠en, No. 37 !kuribe, No. 28 ||khaku, No. 17 ||kabbe.

 $|alo \odot pw\tilde{a} \ II$ and ||khaku| are brothers; $\neq en$ and ||kabbe| are first-cousins; ||kabbe| and ||kuribe| are brothers-in-law; $\neq en$ and $||alo \odot pw\tilde{a} \ II|$ are brothers-in-law.

PLATE 70

Comparative profile view of tall-statured men of advanced age, as in Plate 69.

Note that $\neq en$ has the nearest approach to the "European" or third type of steatopygia, that of $|alo \odot pw\tilde{a}| II$ and ||kabbe| is pancake in type, while that of |kuribe| and ||khaku| is nearer to the angulated type; note too the double gluteal folds. Note also the prognathism and recessed chins of all except No. 37 |kuribe| in the centre.

PLATE 71

Comparative full-face view of:

Short-statured No. 1 malxas (extreme left), intermediate statured No. 69 /alakap (centre), and No. 14 !heixa (extreme right), and tall-statured No. 19 witteman (second on left) and No. 22 //am//na (second on right).

Males of middle age.

PLATE 72

Comparative profile view of short, intermediate and tall-statured males of middle age. Note the great variation in cranial form and facial profile. Note also the variation in buttocks, all approximating to the first type with the exception of No. 69 /alakap where they are of the pancake variety; note the double gluteal folds. Note too the "proptotic" vertebral columns and abdomens, especially of the shorter-statured individuals.

PLATE 73

A lateral view of adult men to show their stature relative to one another and to Mr. Bain, the normal stance and the curvature of their

spinal columns, the proptosis of their abdomens, the horizontal or semihorizontal inclination of their genital organs and their varying head form.

Left to right:

No. 44 /alo⊙pwã II,	No. 22 //am//na,	No. 19 witteman,
No. 14 !heixa,	No. 28 //khaku,	No. 20 !kwoi/kan,
No. 1 malxas,	No. 4 abraham,	No. 16 ≠ubeiku II,
No. 37 !kuribe.	No. 17 //kabbe.	No. $47 \neq en$.

PLATE 74

Closer lateral view to illustrate the same points as were referred to in Plate 73 and to supply further detail in respect of the facial features and the distribution of the scalp hair.

Left to right: The two in front No. 22 //am//na and his cousin No. 19 witteman are very tall and erect and although the face is projected in front of the forehead in the former and retracted behind it in the latter, their features are essentially refined. The next two /alo@pwa II and //khaku are brothers and very similar in build and facial features, the muzzle-like and chinless form (characteristic of the Boskop type) being very striking. The last two !kwoi/kan and !heixa have features that are respectively Mediterranean and Mongolian in type. !kwoi/kan is the nephew of witteman and has a typically Bush cranial form as had also //khaku, and a truly pepper-corn hair. !heixa or platkop has a brachycephalic but Boskopoid form of head and an even more characteristically Bush pepper-corn hair distribution. Note the double gluteal folds in all except !kwoi/kan and the form of the ears.

PLATE 75

Lateral view of women and children to show their stature relative to one another, their normal stance and the curvature of the spinal columns, the proptosis of their abdomens and the variation in their colour, steatopygy, head-form and breast-form. (Type 1, 2 and 3 refers to the type of steatopygy, type 3 being indistinguishable from the European).

Left to right: No. 9 kuskai (type 1 infantile), klein mate and her two sisters, (unexamined and ancestry unknown), No. 8 lena (type 3), No. 10 thobaku (type 1), No. 38 !kx²un|i (type 1), No. 15 !kai|ko (type 1), No. 18 |am\neq ari (type 3), No. 30 ou tsamas (type 2), No. 49 |kãwi II (type 3), No. 39 !kamku II (type 1) almost adult, No. 29 haki and No. 45 !kxûbe (type 2), No. 23 \neq gauke (type 1), No. 52 |kobe (type 1), No. 2 !kweike (type 2), mate (unexamined), No. 7 marta, (type 1) almost adult,

No. 6 klein /khanako (type 1 infantile), No. 54 suxuu VI (type 1), No. 33 /ues (type 1 infantile).

PLATE 76

Full-face view of females and children to show their stature relative to one another, their body habitus, their skin colouration, the form of their faces and breasts and the hairlessness of their bodies.

Left to right:

- Back row: No. 10 thobaku, No. 38 !kx²un/i, No. 15 !kai/ko, No. 58 ≠abaitu, No. 30 ou tsamas, No. 49 /kãwi, No. 39 !kamku II, No. 29 haki, No. 45 !kxube, mate (ancestry unknown), No. 7 !kweike with No. 3 koro (in her arms).
- Front row: No. 12 tsaman II and No. 13 \neq ⁹amme son and daughter of thobaku, No. 9 kuskai, klein mate and her two sisters (ancestry unknown but related to mate), No. 8 lena, No. 6 klein/khanako, No. 54 suxuu VI, No. 33 /ues.

Note the enlarged areolae of the breasts of thobaku, suxuu VI and ou tsamas; the globoid areolae of $|kx^2un|i$, lena, $|k\tilde{a}wi|$, |ues, $\neq gauke$ and |kabe|.

PLATE 77

The gemsbok play

The adults taking part are from left to right:

No. 19 witteman, No. 22 //am//na, No. 14 !heixa (the gemsbok), No. 4 abraham (with bow) and No. 1 malxas. Note the characteristic postures of the bodies in action especially those of the children and abraham.

PLATE 78

/khanako (right) daughter of abraham and her daughter (left) klein /khanako (by a Hottentot) in customary attire. This picture was taken after the slaughtering of some goats as food. Note in the daughter especially the smearing of the body with the fresh blood (especially the face and legs) and the patterns drawn thereon with the fingers. Although both these women have the small short Bush type of cranium, that of /khanako is narrow and pentagonoides acutus type while that of her daughter is broad and pentagonoides obtusus.

PLATES 79 & 80

Full-face and profile views of No. 7 marta daughter of /khanako by a Bushman, an excellent type of a well-nourished and well-formed young Bush woman in customary clothing (save for the identification ticket at her neck). Note the pentagonoides acutus cranium, the pepper-corn hair, the absence of an ear lobule and the sthenic body habitus. Any extraneous features are Armenoid.

PLATE 81

No. 28 & //khaku, No. 42 & !kaap, No. 60 & klein taki (or piet), No. 7 φ marta, No. 33 φ /ues, No. 6 φ klein /khanako, No. 51 φ /keri/keri, No. 40 & tamtam, No. 56 & !nansi.

PLATE 82

A group of 5-7 year old boys caken in Johannesburg.

Left to right: No. 36 //khaku III, No. 11 atsani, No. 66 //nwahu, No. 41 /gom/korop.

PLATE 83

The Johannesburg Bushman camp in Johannesburg with No. 42 !kaap in the foreground. He has a Boskop head of acute pentagonoid type; his face is fundamentally Bush, secondarily Boskop and tertiarily Mongolian.

PLATE 84

No. $49 \circlearrowleft /k\tilde{a}wi$ takes No. $9 \circlearrowleft kuskai$ pick-a-back. Note the globoid form of areola and contrast it with those of the yong women in Plate 81. No. 49 is a Bush-Mediterranean-Boskop facial type and No. 9 closely approximates her type facially.

PLATE 85

To illustrate female facial types. These three women have typical Bush heads and also faces that are predominantly Bush. No. 5 /khanako B.M.?Bo. (above) is secondarily Mediterranean in type and there appears

also some Boskop influence in the forehead, prominence of eyebrows and large but pursed lips. No. 10 thobaku B.Mo.A. (centre) is distinctly Mongoloid, but the form of nose and mouth betray Armenoid features. No. 23 \(\neq \text{gauke} \text{ B.Bo.} \) (below) has the jutting mouth and massive cheekbones of the chinless Boskop type. The ears (above and below) are of the small squarish Bush variety, the centre one is also small but is more shapely in form, probably as the result of the Mongoloid mixture. Note also the sphaeroid small-areolar type of breast (above) and the pendulous large-areolar type (centure and below). Compare too the fine, closely-coiled but sparsely-distributed pepper-corn hair (centre and below) with the coarse, loosely-coiled and more generously furnished type (above) All tend to follow the skull-cap type of distribution.

PLATE 86

To illustrate female facial types. These are also predominantly Bush in head and face but No. 6 klein/khanako B.M.?Bo. (above) has a very broad forehead and is Mediterranean in type (compare with her mother No. 5 Plate 85; there is also a third element probably Boskopoid accounting for the full lips and the stout zygomata. Her face is decorated with patterns in ash and blood of her own design. No. 49 /kawi, B.M.Bo. (centre) is similarly Mediterranean and Boskopoid in her features. No. 45 !kxube B.Mo.Bo. (below) is a curious disharmonic mixture, the upper part of the face being Mongoloid, the lower and massive but retreating jaw being typically Boskopoid (compare with her father No. 44. Plate 89). The ears are very varied; that above is Bush in type but the other two are Boskopoid rather than Bush, the centre one being almost intermediate between the two and the lower one adding the non-Boskop and non-Bush feature of a slight lobulation. Note too the conoid type of breast with globoid nipple (above and below). Contrast also the coarse peppercorn (above) woolly (centre) and fine, discrete peppercorn (below) types of hair distribution. That above is skull-cap in pattern, the centre one shows the temporal advance while that below has the central frontal V-shaped advance.

PLATE 87

To illustrate female facial types. No. 29 haki Bo.B. (above) like No. 38 !kx?un/i Bo.B.M. (below) is predominantly Boskopoid in face although the former has a Bush head and the latter's head is Bush-Boskop. Whereas, in both, the secondary facial qualities are Bush, those in !kx?un/i are complicated by a more refining Mediterranean element. Compare particularly the noses and lips. No. 30 ou tsamas B.Bo.M. (centre) the

sister of haki shows the reverse side of the picture, having predominantly Bush and secondarily Boskop facial features, with a Mediterranean element. Her head however is Bush-Boskop like that below. The form of the ears in all three is the pear-shaped Boskopoid though the bottom one has slight lobulation (probably Mediterranean in origin). Note the conoid form of breast and globular areola (above and below) and the approximation to the pendulous breast with expansive areola (centre). Contrast aslo the cranial hair with that illustrated in previous plates. Each tends towards the V-shaped frontal process of hair and the type of distribution is probably that of Boskop Man.

PLATE 88

To illustrate female facial types. No. 52 //kobe Bo.B.A. (above) is the sister of !kx²un/i (Plate 87) and has the same predominantly Boskop type of face with secondary Bush features but the third disturbing element is Armenoid rather than Mediterranean. No. 48 /kuruke Bo.M. (centre) on the other hand shows no recognisable Bush features. Her face is Boskopoid with a secondary Mediterranean element. The ear above is truly Boskopoid, that in the centre is also Boskopoid but has some of the Mediterranean fullness. In both the cranial hair is almost woolly due doubtless to foreign admixture.

Below are two pictures taken by flashlight at night showing the women dancing alone on dried gemsbok skins near a camp fire and hut away from the vicinity of their general camp.

PLATE 89

To illustrate male facial types. No. 44 /alo pwa II Bo.?M (above) is the purest type available of what we define as the Boskop face accompanying the long Boskop head. It has no detectable extraneous elements unless they are Mediterranean (e.g. in the nose). Note particularly the prognathous facial profile. No. 16 \(\neq ubeiku II \) Bo.B.?A (centre) has a head of the same type, but even more pronouncedly pentagonoid; his face has however Bush features and his facial hair has an Armenoid type of richness and distribution. No. 17 //kabbe II Bo.A.Mo. (below) has a head of Boskop type but with Bush features; note too the pepper-corn hair. His face is Boskopoid also, but betrays Armenoid features particularly in the nasal region and thirdly Mongoloid traits, although his facial hair is distributed in Mediterranean (Hamitic) fashion. The ears (centre and below) are of Boskop type, so too is that above although it appears to have some shell-like Mediterranean features. The cranial hair of the upper and centre individuals contrasts strongly in its looseness and coarseness with the tight little pepper-corns below.

PLATE 90

To illustrate male facial types. No. 47 \neq en Bo.A. (above) is another Boskop type of head with broad frontal region. The face is Boskop-Armenoid with a beard of Mediterranean type. No. 37 !kuribe Bo.A. (centre) has a genuinely Boskop head of the type which is very broad frontally. His face is also Boskop-Armenoid and the beard follows the Armenoid type of distribution. The cranial hair is coarsely not tightly peppercorn in both of them. Contrasting with these two is No. 28 Bo.B.?M ||khaku| whose head is Bush in type, note also the well-scattered tight, pepper corn hair. The face, however, is Boskop-Bush with some questionable Mediterranean features while the little hair he has follows a Mediterranean distribution. The disharmony between the Bush head and Boskop face is particularly obvious in full-face view. The ear (below) is of Bush type though enlarged, those (above and centre) are of the Boskop, pear type but lobulated to some degree.

PLATE 91

To illustrate male facial types. These three have heads that are of the Bush, Boskop-Bush and Bush-Boskop respectively, that of No. 69 /alakap Bo.Mo.?M (below) being definitely Australoid as well. No. 19 witteman Bo.Mo. (above) displays marked trigonocephaly and metopism; his face is Boskop-Mongolian and his facial hair is distributed in Mongolian fashion. No. 22 //am//na Bo. A. (centre) displays trigonocephaly also; his face is Boskop-Armenoid and his facial hair a Mediterranean distribution. The cranial hair is almost woolly in both of them. No. 69 /alakap (below) also displayed marks trigonocephaly and metopism and very scattered, tight, pepper-corn hair; his face is of the Australoid-Boskop type but also shows Mongolian features and possibly some Mediterranean ones; the facial hair is typically Mediterranean in distribution. Ears (above and centre) Boskop; ear (below) more of Bush type but slightly lobulated indicating (? Mediterranean) admixture.

PLATE 92

To illustrate male facial types. No. 1 malxas B.Mo.M. (above) has a Boskop head which is slightly trigonocephalic. His face is Bush Mongolian Mediterranean and his facial hair is Mongolian in distribution. Note the tight little peppercorn cranial hair. No. 20 !kwoi/kan Bo.B.M. (centre) has a Bush type of head which displays slight trigonocephaly and strong metopism. His face is Boskop-Bush Mediterranean but the facial hair is as yet undeveloped. The cranial hair is a coarsely clustered peppercorn type verging on woolly. His ear is of the small, squarish

Bush type whereas that of malxas is large, shell-like, lobulated and indistinguishable from the European (Mediterranean?) type of ear.

Below are pictures of No. 16 \neq ubeiku II, the maker of arrows and bows, plying his craft.

PLATE 93

To illustrate the several stages in the ontogenetic development of steatopygia of the first type.

Above (left) //ºamme the infant daughter of thobaku (centre right). Centre (left) klein/khanako an adolescent girl; above (right) !kamku II adult, recently married young woman. Note the retention of the infantile body posture throughout adult life.

Below are pictures of the Eland Bull Dance; left, an early stage in the dance when the participants are clothed; right, a later stage when all are divested of clothing save for their beads and head-gear. The characteristic posture of the body in movement of both males and females is clearly exhibited in these photographs. Compare also Plate 77.

PLATE 94

To illustrate the hyposthenic bodily habitus, first type of steatopygia and the external genitalia of the sisters (left series), No. 38 !kx²un/i and (right series) No. 52 //kobe. Note the conoid breast and globoid nipple of the former and the pendulous wide-areolar type in the latter. The form of the labia is not distinctly shown but those of the former are of the wattle while those of the latter are of the butterfly variety.



Plate 57. Family of abraham or !gurice

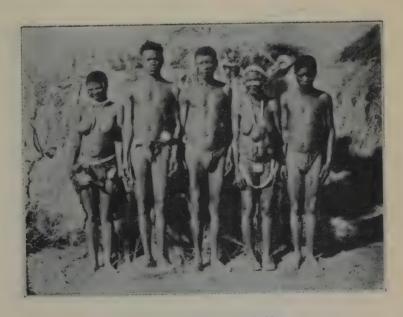


Plate 58. Family of ||kabbe





Plate 59. Family of ||am||na



Plate 60. Family of //khaku

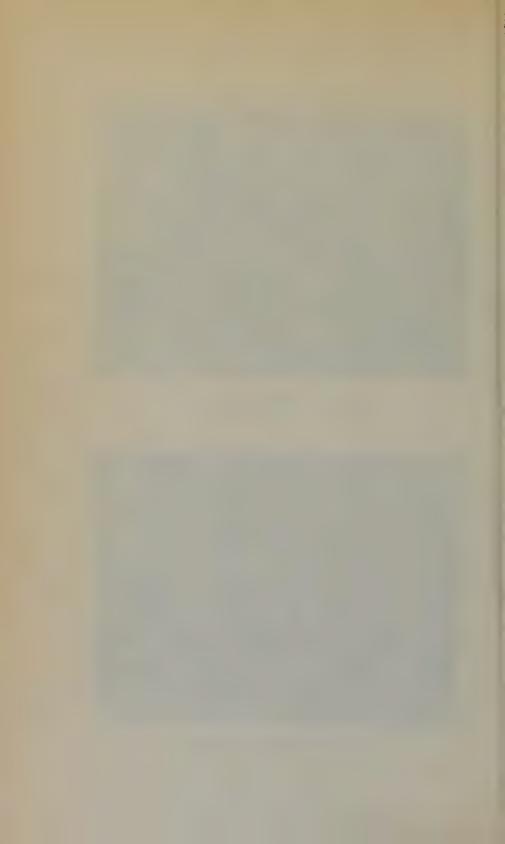




Plate 61. Family of !kuribe



Plate 62. Family of |alo@pwa II

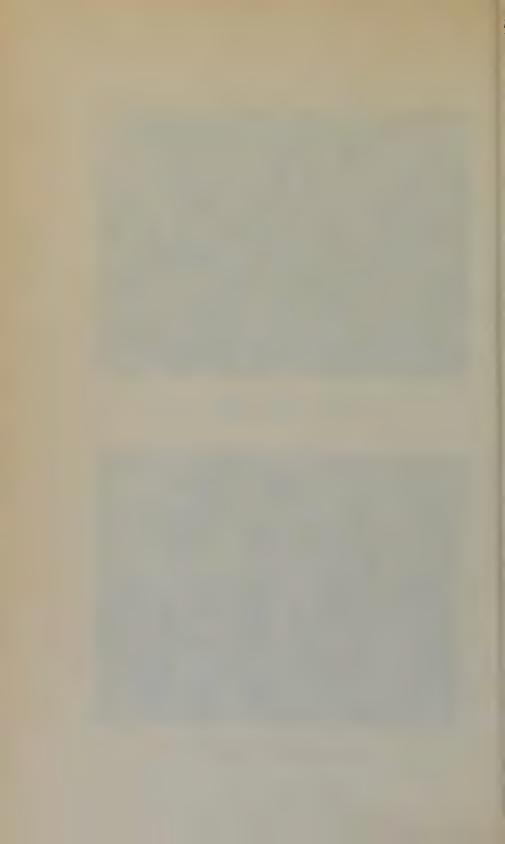




Plate 63. Family of \neq en



Plate 64. Family of uye





Plate 65. Family of |alakap



Plate 66. Professor L. F. Maingard (left) and Professor I. D. MacCrone (right) with three Bush people





Plate 67. ≠ubeiku II making an arrow



Plate 68. koro: to show sacral spot





Plate 69. Tall-statured men of advanced age

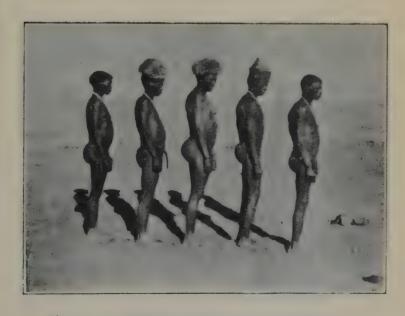


Plate 70. Profile view of tall-statured men of advanced age





Plate 71. Males of middle age



Plate 72. Profile view of males of middle age





Plate 77. The gemsbok play

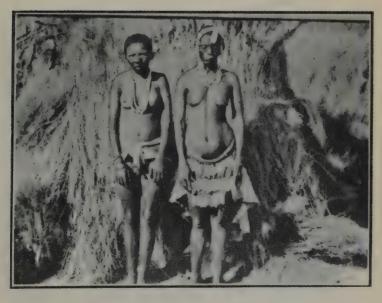
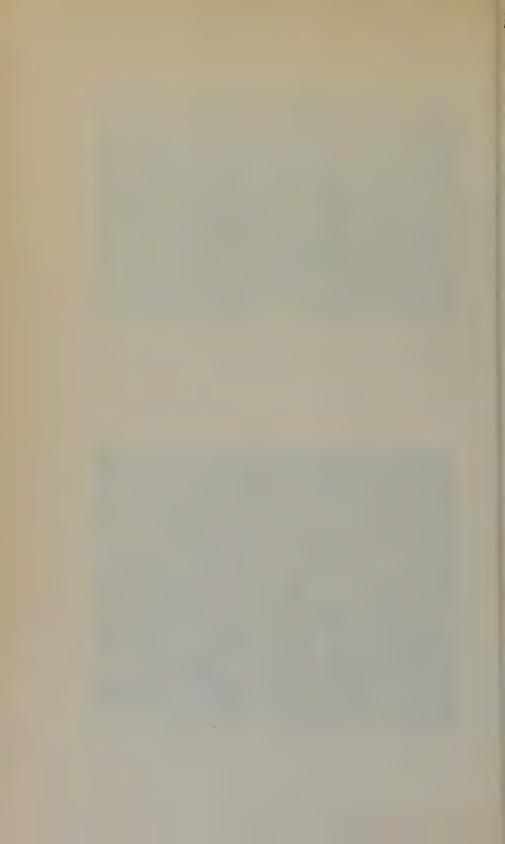


Plate 78. |khanako and klein |khanako in customary attire



Plates 79 & 80. Full-face and profile views of No. 7 marta daughter of |khanako by a Bushman









Plate 81. Young women and children



Plate 82. Group of 5-7 year old boys





Plate 84. kawi and kuskai pick-a-back

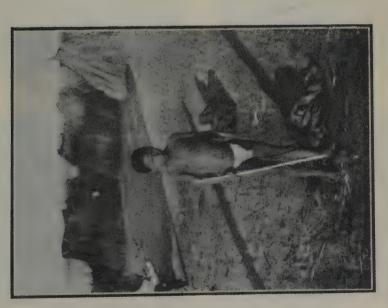


Plate 83. |kaap, No. 42, at Bushman camp, Johannesburg



Plate 85. To illustrate female facial types



No. 5. |khanako



B.M. ? Bo.



No. 10. thobaku



B.Mo.A



No. 23. ≠gauke



B.Bo



Plate 86. To illustrate female facial types



No. 6. klein | khanako



B.M. ? Bo.



No. 49. /kwai



B.M.Bo.



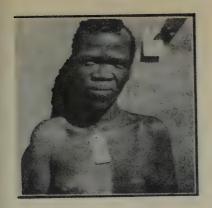
No. 45. !kxube



B.Mo.Bo.



Plate 87. To illustrate female facial types



No. 29. haki



Bo.B.



No. 30. ou tsamas



B.Bo.M.



No. 38. !kx?un/1



Bo.B.M.



Plate 88. To illustrate female facial types



No. 52. //kobe



Bo.B.A.



No. 48. /kuruke



Bo.M.



Women dancing alone at night





Plate 89. To illustrate male facial types



No. 44. |alo@pwa



Bo. ?M.



No. 16. ≠ubeiku



Bo.B. ?A.



No. 17. ||kabbe



Bo.A.Mo.



Plate 90. To illustrate male facial types



No. 47. ≠en



Bo.A.



No. 37. !kuribe



Bo.A.



No. 28. ||khaku



Bo.B.? M.



Plate 91. To illustrate male facial types



No. 19. witteman



Bo.Mo.



No. 22. ||am||na



Bo.A.



No. 69. |alakap



Bo.Mo.?M.



Plate 92. To illustrate male facial types



No. 1. malxas



B.Mo.M.



No. 20. !kwoi/kan



Bo.B.M.



No. 16. \(\neq ubeiku, maker of bows and arrows\)



Plate 93. Ontogenetic development of angulated steatopygia



No. 13. |/amme (foetal)



No. 39. !kamku (young adult)



No. 6. |khanako (infantile)

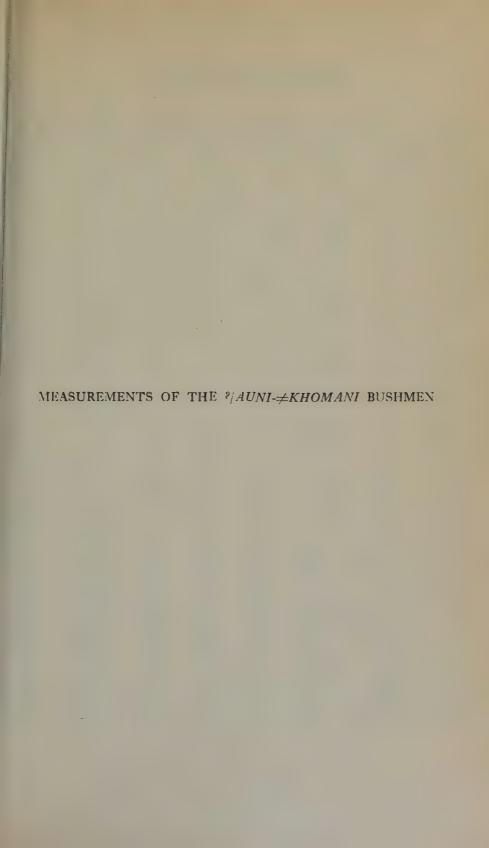


No. 10. thobaku (adult)



Two phases in the Eland Bull Dance





Number	3	31	71	43	27	59
Age in years and Sex	2/12 : F.	6/12 : F.	6/12 : M.	7/12 : F.	9/12 : F.	12/12 : M1
Maximum cephalic L.	146	152	155	164.5	153	152.5
Maximum cephalic B.	112	116	123	122.5	116	127
Auricular Ht. (indirect)	professor	-	-	120		90
Auricular Ht. (direct)			_			
Min. frontal W.	75	82	79	84.5	83	85
External biorbital W.			_	_	_	_
Bizygomatic W.	100	96	112	112.5	92.5	105
Bigonial W.	62	68	70	72.5	64	66
Upper facial Ht.	31	30	42	40	40	37-5
Total facial Ht.	52	65	63	72	71	75
Internal biocular W.	21	27	-	31	26.5	27.5
External biocular W.	78	71	-	-	80	74.5
Interpupillary W.	_	_	_	_	-	_
Nose length	18	21		25	22	26
Nose breadth	25	24.5	26	27.5	26	27
Nose depth	4		8	7-5	7.5	_
Mouth height	16	16		-		18
Mouth width	31	24.5	26		40	37-5
Ear breadth	26	23	30	29	25.5	29
Ear length	39	39.5	41.5	43.5	40	39
Stature	620	66o	*****	710	630	705
Arm length	277	Marine.	olivania.	310	_	-
Leg length (trochanteric)	250	-		330	Aprillance .	-
Leg length (cristal)	310	307.5		395	345	378
Biacromial diameter	135	153	147	137	145	132
Thoracic D. (ant-posterior)	96	107.5	115	112.5	106	105
Thoracic D. (transverse)	110	122.5	110	135	117	123
Intercristal diameter	95	89.5	115	105	95	115
Interspinous diameter			-	_	_	
External conjugate D.	72.5	77-5	77.5	84	87.5	90
Bitrochanteric diameter	117.5	114.5	127.5	125	122	117.5

/ AUNI-≠KHOMANI BUSHMEN

Average	Range	46	13	25	32	34	12
7/12	2/12—12/12	2 M.	2 F.	3 M.	3 F.	3 F.	4 M.
153.8	146 to 164	167	167	162.5	163	162.5	174.5
119.4	112-127	127	127	127	124	122.5	137.5
105	90—120		985	115.5	114	115	124
	-		118	139		-	143
61.3	75—85	93-5	92	87.5	89	89	93.5
			89.0	91.0	month.	provinge	101
103	92.5—112.5	106	110	. 105	102	99	106
67.1	62—72.5	79	73	71	75	73	78
36.7	30— 42	39	42	40	40	43	43
66.3	<i>52</i> — <i>75</i>	80	74-5	71	70	81	76.5
26.6	21—31	27.5	34	28.5	27	30	32
75.9	71—80	80	82	77	79-5	79-5	83.5
_	MARKETS -	_	-	47.5		55	54-5
22.4	1826	26.5	21	22.5	22.5	27.5	27.5
26	24.5—27.5	28.5	28	30	29.5	30	34
6.8	47.5		5	9	8.5	8	10
16.7	16—18	17.5	17.5	15.5	14.5	18	16
31.8	<i>24.5</i> — <i>40</i>	30.5	34	37	31.5	33-5	35-5
27.1	23—30	27.5	28	27.5	25.5	26.5	27.5
40.4	<i>39</i> — 4 3.5	39	40	44.5	41	43	47.5
665	620710	782	827.5	857.5	889	871	961
293.1	277—310	_	343	368	376	381.5	428
290	<i>250—330</i>	345	390	418.5	443	439	502.5
289.3	307.5—395	396	452	468	486	485	- 535
124.8	132—153	135	190	178	177.5	159.5	215
107	96—115	120	136	124	125	120	135
119.6	110—135	120	140	143	142	139	160
102.4	89.5—115	125	134	129	125	130	150
-	_	_	112	97	101	100	120
68.6	72.5—90	100	111	105	100	100.5	115
120.7	14.5-127.5	140	154	155	150	150	175

Number	50	26	35	67	Average	Range
Age and Sex	4 : F.	5 : F.	5 ; F.	5 : M.	3.6	25
Maximum cephalic L.	175	168	175	174	168.9	162.5—175
Maximum cephalic B.	130	127.5	127	130	128	122.5-137.5
Auricular Ht. (indirect)		111	125.5	122.5	115.8	98.5-125.5
Auricular Ht. (direct)	-	137		-	134	118143
Minimum frontal width	99	94-5	96	94.5	92.9	87—99
External biorbital W.	91.0	98.0			94.0	89—101
Bizygomatic W.	100	107	112	104	105.1	99—112
Bigonial W.	75	80	77.5	78	76	71—80
Upper facial Ht.	_	46.5	48		42.7	3948
Total facial Ht.	72	81	83	-	76.6	70—83
Internal biocular W.	27	32	33	_	30.1	27—34
External biocular W.	79	82.5	82.5	erroldingly.	80.6	77—83.5
Interpupillary W.	-	54.5	56.5		53.6	47.556.5
Nose length	26	27.5	32		25.9	21—27.5
Nose breadth	22	34	32	reading.	28.6	22-34
Nose depth	5	xx	10	_	8.3	811
Mouth height	22	17	18		17.3	14.5—22
Mouth width	36	33	35	_	34	30.5—37
Ear breadth	26	31	30	_	27.7	25.5—31
Ear length	39	44	44.5	-	42.5	3947.5
Stature	859	1021	1029.5	970	906.8	782—1029.5
Arm length	and the same of th	434	459-5	man.	398.6	343-459.5
Leg length (trochanteric)	387	508	523.5		439.6	345523.5
Leg length (cristal)	455	568	599		493.8	396599
Biacromial diameter	180	215	216	230	189.6	135230
Thoracic D. (ant-posterior)	145	135	141		131.2	120—145
Thoracic D. (transverse)	157	155	154.5		145.7	120160
Intercristal diameter	170	150	144	147.5	140.5	125—170
Interspinous diameter	95	110	119	117.5	107.9	95—120
External conjugate D.	105	125	119	115	109.6	100—125
Bitrochanteric diameter	150	170	167.5	170	158.2	140—175
				- / -	430.8	110 113

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9	36	41	68	11	66	72	24
5 : F.	6 : M.	6 : M.	6 : F.	7 : M.	7 : M.	7 : M.	8 : M.
165	173	186	167	171.5	173	177	172
136	130	133	128	136.5	139	136	131.5
101	128.5	119	123.5	125	128	110.5	106
147	145	149	129	144	138.5	136.5	143
96	92.5	96	93	97	94	99.5	95
97	95-5	102.0	97	95	98	101.0	100
104	103	112	108	109.5	101.5	114	110
75	73-5	79	83	84	82	79	74
45	48	42	41	48	42.5	48	48
83	84	81	72	89.5	78.5	87.5	83
32	33	33	33.5	37	32.5	31	37.5
79	81.5	81.5	76.5	86	8r	84	88
54	50	51	50.5	57	52 .5	51	57
31.5	29.5	31	30	28.5	31	34-5	29
30	31.5	33	34	37.5	33.5	33-5	37
10	12.5	13	10	11	9	10.5	II
19	18.5	14.5	20	19	18.5	14	17.5
34.5	37.5	34	34.5	42	38.5	39.5	39
26	33.5	28.5	28.5	25.5	29	32.5	27
45	48.5	44-5	39.5	44.5	50	49-5	45
1056.0	1067.5	1141	1023.5	1142.5	1062	1074	1121
490	465.5	514.5	431.5	490.5	459	475	482.5
554	535-5	614.5	539	583	542	565	561.5
628	608	674	606	666.5	627.5	633	652.5
225	220	230	232.5	235	240	235	225
130	130	145	122.5	150	142.5	150	145
150	160	170	167.5	170	165	175	170
150	160	165	147.5	160	158	170	160
135	130	135	120	130	132.5	150	130
140	125	140	120	130	125	130	130
185	175	190	182.5	195	180	185	195

Number	42	60	65	55	40	56
Age in years and Sex	8 : M.	8 : M.	8 : F.	9 : F.	10 : M.	10 t M.
Maximum cephalic L.	184	180	176	176	184	184.5
Maximum cephalic B.	138	137	135	133	141	136
Auricular Ht. (indirect)	120.5	114.5	112.5	110	118.5	128.5
Auricular Ht. (direct)	147.5	138.5	135	146	137.5	150
Minimum frontal width	99	97	97	96	100	97
External biorbital W.	106.5	111.0	106.0	100	119.0	102
Bizygomatic W.	117	112	114.5	III	117	113
Bigonial W.	82	79	84	90	81.5	81
Upper facial height	51.5	50	44.5	54	48	43
Total facial height	91.5	84.5	84	87	83	86
Internal biocular W.	34.5	32	33	34	32	33.5
External biocular W.	88	86.5	90.5	94	87	91
Interpupillary W.	60	54	56	52	58.5	54
Nose length	34.5	30	29	35	34	32.5
Nose breadth	34.5	34.5	36.5	36	35	33
Nose depth	11	8	9.5	13	9.5	11
Mouth height	22	18	20	21	20.5	20
Mouth width	42	38	40	41	46	44
Ear breadth	29.5	30	29	30	32	33
Ear length	49.5	45.5	44	50	49.5	49.5
Stature	1269	1114.5	1202.5	1204	1391	1318
Arm length	584	429	537	510	648.5	577
Leg length (trochanteric)	659.5	554	649.5	634	776.5	691.5
Leg length (cristal)	750	640	722	729	876.5	797.5
Biacromial diameter	245	210	256	230	295	245
Thoracic D. (ant-posterior)	160	139	145	130	160	135
Thoracic D. (transverse)	185	161	180	170	200	190
Intercristal diameter	185	152.5	165	160	200	175
Interspinous diameter	150	119	130	130	165	135
External conjugate D.	155	123	142.5	120	165	135
Bitrochanteric diameter	210	179	202.5	180	240	205



Plate 95. Women carrying Tsamma in nets.



Plate 96. Women extracting seeds from Tsamma.





Plate 97. Winnowing roasted Tsamma pips.



Plate 98. Cleaning roasted Tsamma pips.

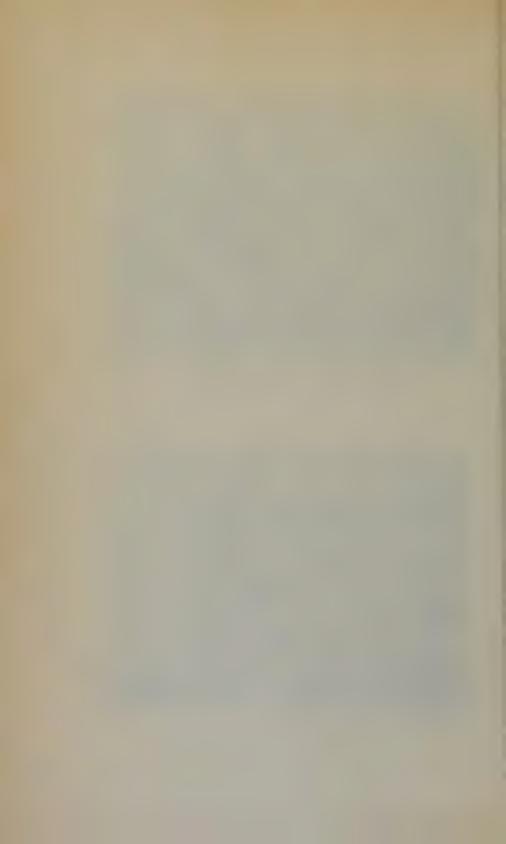




Plate 99. Pounding roasted Tsamma pips.



Plate 100. Smearing Tsamma oil on body.





Plate 101. Malxas smearing himself with Tsamma oil.



|?AUNI-≠KHOMANI BUSHMEN

erage	Range	8	64	33	63	6	57
7.1	5-10	11 : F.	11 : F.	12 : F.	12 : M.	- 13 : F.	. 13 : M.
176.4	165—186	180	179.5	185	179.5	177	. 184
1 135	128—141	132	132.5	134	144	139	140
117.5	101128.5	117.5	103	121	110.5	120	122,5
141.9	129—150	147	129	144	140	141	139
96.4	92.5—100	101	95	97	102.5	100	106
102.1	95.0—119.0	104	104	106	111	107	III
110.5	101.5—117	116 .	117.5	122	123	116	122
80.5	73.5—90	87	92	89	92	77	92
46.8	41—54	50	46	48.5	51.5	54	48.5
83.9	7291.5	86	84,5	86.5	94.5	88	89
33.5	31—37.5	32	35	35	36	38	36.5
85.3	76.5—94	90	85.5	93	91	92	90.5
39.8	5058.5	54	57	63	61	61	67
31.4	28.5—35	36	33	28.5	37	34.5	34
34.3	30—37.5	32	38	40	37	36.5	36.5
10.6	913	14	9.5	10	II,	* II	15.5
18.8	14—22	16	22	20	21.5	20	23
39.3	344 6	40	43	43	42.5	46	38
29.6	25.5—33.5	25	~ 29	29	33	28	27
46.7	39.550	50	51.5	47	. 49	39	46
1156.2	1023.5—1391	1332.5	1350	1375	1369	1332	1405
506.7	429—648.5	591.5	590.5	622.5	621	608	625
604.3	535.5—776.5	679	745-5	717	755	731	749
686.5	606—876.5	789	828.5	831	858.5	834	838
237.4	210295	280	285	280	290	280	290
141.7	122.5—160	150	155	155	180	145	155
159.5	150—200	200	200	210	210	190	205
164.9	147.5—200	210	185	200	210	200	210
135.1	119—165	185	150	160	165	180	150
134.3	120—165	175	150	160	160	150	165
192.9	175240	235	220	250	235	245	240

c

Number	Average	Range	7	49	54
Age in years and Sex	12	11—13	16 : F.	17 : F.	18 : F.
Maximum cephalic L.	180.8	177185	176	179	179.5
Maximum cephalic B.	136.9	132—144	135	136	145
Auricular Ht. (indirect)	115.8	103122.5	113	116	114
Auricular Ht. (direct)	140	129—147	139	146	139
Minimum frontal width	100.3	95—106	94	99	101
External biorbital W.	107.2	104—111.0	111	104	108
Bizygomatic W.	119.4	116123	114	126	126
Bigonial W.	88.2	77—92	82	92	90
Upper facial height	49.8	46—54	48.5	50	47
Total facial height	88.1	84.5-94.5	84	87.5	88
Internal biocular W.	35.4	<i>32</i> — <i>38</i>	31	35	34
External biocular W.	90.4	85.5—93	83	96.5	89.5
Interpupillary W.	60.5	54—67	54.5	63.5	57
Nose length	33.8	28.5—37	32	32.5	34
Nose breadth	<i>3</i> 6.7	32-40	34	37	38
Nose depth	11.8	9.515.5	10	14	10
Mouth height	20.4	16—23	19	19	16
Mouth width	42.1	38—46	42	44	45
Ear breadth	28.5	2533	30	33.5	30
Ear length	47.1	39—51.5	47	54	42
Stature	1360.6	13321405	1413	1529	1400
Arm length	609.8	<i>590.5</i> — <i>625</i>	618	720	606
Leg length (trochanteric)	729.4	679755	761	806.5	775
Leg length (cristal)	829.8	789—858.5	892	942.5	867
Biacromial diameter	283.2	280290	270	335	310
Thoracic D. (ant-posterior) 156.7	145—180	170	170	150
Thoracic D. (transverse)	202.5	190—210	205	220	220
Intercristal diameter	202.5	185—210	205	250	245
Interspinous diameter	165	150—185	180	200	200
External conjugate D.	160	150175	175	195	185
Bitrochanteric diameter	237.5	220—250	280	285	260

/?AUNI-≠KHOMANI BUSHMEN

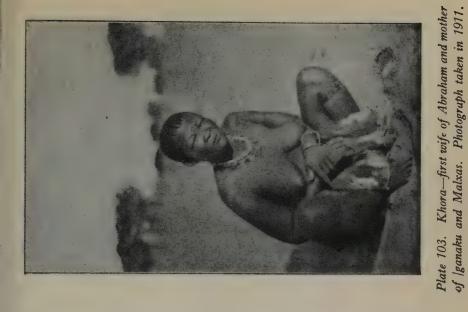
39	51	20	21	30	Average	Range
8 : F.	18 : F.	19 : M.	19 : F.	30 : F.	18.1	1620
184	179	177.5	174.5	181	178.8	176184
144	136	139	131	134	137.5	131—145
126	112	115	121	131	118.5	112—131
140	142	140	143	-	141.1	139146
104	100	102	96	98.5	99.3	94.5104
116	106	110.5	109		109.2	104111.0
128	115	125	- 119	125	122.3	114—128
96	91	88	86	88	89.1	8296
49.5	57	52.5	49	50	50.4	4757
93	93	97.5	91.5	94	91.1	8 4 97.5
37.5	34	37.5	38.5	36	35.4	3137.5
91	93	87.5	87	95	90.6	8396.5
66	64	6 <i>t</i>	64.5	59-5	61.3	54.566
37	42	36	31	32	34.6	31—42
35.5	38	36.5	38	41	37.3	34—41
14	10	16	14.5	II	12.4	10—16
19	17	22.5	22.5	17.5	19.1	16—22.5
47-5	52	42.5	45	37-5	44.4	37.552
29	32	28.5 ~	28.5	23.5	29.4	<i>23.5—33.5</i>
52	48	47	51	49-5	48.8	4254
1539	1454	1500	1433	1442	1463.8	14001539
665	623	688	641	651	651.5	606—720
780	775	798.5	782	799-5	784.7	761—806.5
920	871	903	889	900	898.1	867942.5
315	275	325	330	300	307.5	270—335
165	140	165	150	160	158.8	140170
240	200	225	220	210	217.5	200—240
250	200	215	225	210	221.9	180250
220	170	170	165	185	186.3	165220
225	150	172.5	170	185	182.2	150—225
320	260	255	280	265	263.8	225285

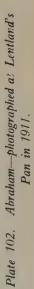
Number Age in years and Sex Maximum cephalic L.	19 23 : M. 182 137	45 23 : F. 181	53 22 : M. 189	74 22 : M.	76 22 : M.	Average 22
	182	181			24 . 141.	22
iviaximum cepnanc L.	137		109	TAT	186	185.8
Manipular and half D		137	146	191	142	141.2
Maximum cephalic B.	125		,			124
Auricular IIt. (indirect)		99	132	132	132	143.5
Auricular Ht. (direct)	138	134.5	147	145	153	102.5
Minimum frontal width	106	101	105	102.5	98	
External biorbital W.	115	112	115	117	106.5	112.5
Bizygomatic width	132	123	134	132	122.5	128.7
Bigonial width	100	98	103	98	96	99.0
Upper facial height	53	50	53	57.5	56.5	54
Total facial height	97	94	97	105.5	101	98.9
Internal biocular width	35	37.5	35	36.5	31	35
External biocular width	91.5	86	95	94	88	90.9
Interpupillary width	61	57	63	59.5	56.5	59.2
Nose length	31	41.5	33.5	38	38.5	36.5
Nose breadth	39	34.5	42	43	37	39.1
Nose depth	14	8.5	13.5	16	15	13.4
Mouth height	24	17.5	21	22	22	23.3
Mouth width	43	44	44	47	42.5	44.1
Ear breadth	27.5	36.5	37	34	32.5	33.5
Ear length	54-5	55-5	57	53	57	55.4
Stature	1600	1464	1590	1585	1605	1568.8
Arm length	702	626.5	700.5	689	714	686.4
Leg length (trochanteric)	873	77 I	828	821	831	824.8
Leg length (cristal)	972	900	931	940	958	940.2
Biacromial diameter	360	305	355	360	330	342
Thoracic D. (ant-posterior	195	160	190	185	180	182
Thoracic D. (transverse)	235	210	245	260	230	236
Intercristal diameter	220	230	245	225	235	231
Interspinous diameter	160	190	210	200	195	191
External conjugate D.	200	185	185	190	190	190
Bitrochanteric diameter	280	250	275	290	285	276

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Range	2	14	23	29	70	75	77
22-23	28 : F.	29.5 : M.	27 : F.	29.5 : F.	29.5 : F.	29 : M	27 : M.
181—191	181	185	181	180	185	186.5	202.5
137—146	144	152	132	137	137	146	155
99—132	126	132	117.5	115.5	109.5	118.5	130
134.5—153	142.5	*******	138	138	144.5	-	menula
98—106	ioi	113	99	101	98.0	105	114
106.5—117	118		011	f f f	111	-	
122.5—134	121	142	120	125	129	134.5	140
96—103	87	104	84	89	92	96	108
5057.5	бı	53	57	§1	54	53.5	61
94—105.5	98	94	93	96	99	95	111
31-37.5	35	4i	38	34.5	38	36.5	43
86-95	92	93	82.5	93	91.5	91	98.5
5 6.5—63	53	68	57	60	66.5	61	61
31-41.5	34	34	36	31.5	37.5	38.5	42
34.5-43	32	41	39	43	42.5	42.5	43.5
8.5—16	11	11	12	11	16	14.5	12.5
17.5—34	22	15	17	18	22.5	16	20
42.5-47	44	52	42	48.5	50.5	56	47.5
27.5—37	32	32	29	27	34.5	31.5	35-5
5357	41	53	49	47	58.5	55	63
1464-1605	1457	1496	1469.5	1518.5	1594	1518	1616
626.5—714	627	680	631	669	702	686	743
771—873	754	812	785	808	832	773	822
900972	872	884	904	931.5	981	899.5	943.5
305360	300	340	280	315	335	355	360
160—195	155	130	170	165	180	185	195
210260	210	250	200	220	240	230	255
220245	220	220	230	220	250	230	245
160210	195	170	180	195	215	205	200
185—200	185	190	195	190	210	190	190
250290	250	270	270	280	320	265	285

Number	Average	Range	1	10	22
Age in years and Sex	28.5	2729.5	32.5 : M.	34.5 : F.	34.5 : M
Maximum cephalic L.	185.9	180-202.5	186	174	189.5
Maximum cephalic B.	143.3	132—155	143	140	139
Auricular Ht. (indirect)	121.3	109.5132	125	111	124
Auricular Ht. (direct)	140.8	138—144.5	144	130	149
Minimum frontal width	104.4	98—114	100	99	99.5
External biorbital W.	112.5	110.0118	115	105	117
Bizygomatic width	130.2	120—142	128	119	134
Bigonial width	94.3	84108	95	98	101
Upper facial height	55.8	51—61	61	53	53
Total facial height	98	93—111	98	94.5	102
Internal biocular width	38	34.5—43	37	33	41
External biocular width	91.9	82.598.5	94	84.5	98
Interpupillary width	60.9	53—66.5	65	53.5	63
Nose length	36.2	31.5-42	37	37	34
Nose breadth	40.5	32-43.5	41	34.5	44
Nose depth	12.6	11—16	16	8	16
Mouth height	18.6	15-22.5	24	13.5	16.5
Mouth width	48.6	4256	47	45	53
Ear breadth	31.6	2735.5	30	29.5	31.5
Ear length	52.4	4163	54	47.5	57.5
Stature	1524.1	14571616	1491	1356	1601
Arm length	679.7	627—743	696	571.5	730.5
Leg length (trochanteric)	798.0	754—832	795	704.5	801
Leg length (cristal)	916.5	872—981	919	817	927
Biacromial diameter	326.4	280—360	355	290	340
Thoracic D. (ant-posterior)	177.1	155—195	205	160	195
Thoracic D. (transverse)	229.3	200255	235	210	245
Intercristal diameter	230.7	220—250	220	225	215
Interspinous diameter	194.3	170—215	190	170	185
External conjugate D.	192.9	185210	180	190	180
Bitrochanteric diameter	277.1	250—320	260	289	250





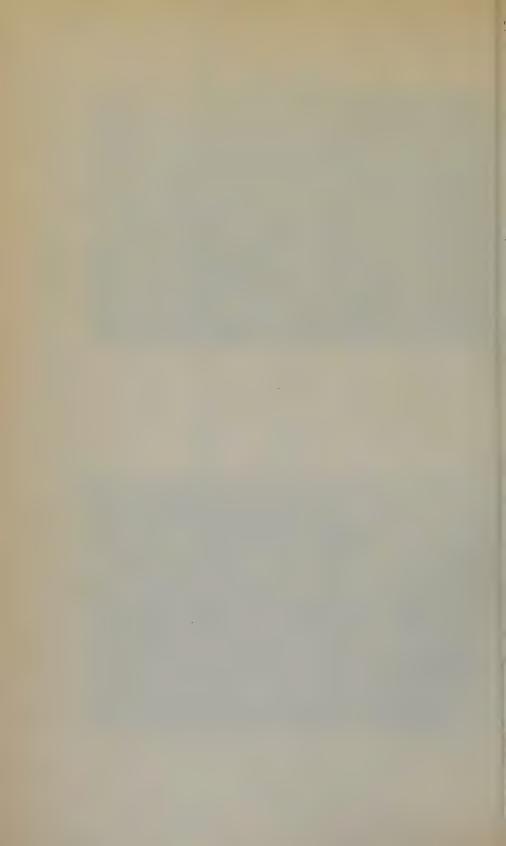
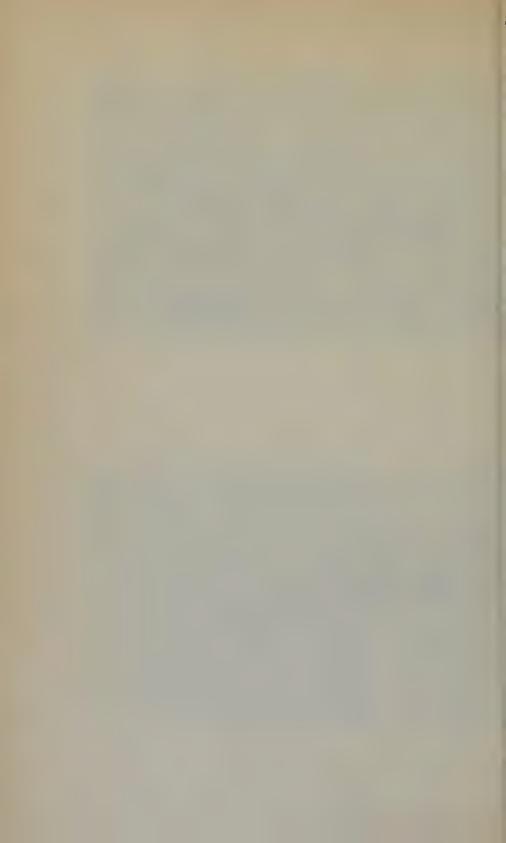




Plate 104. Pauni man-photograph taken in 1911.

Plate 105. Two Vauni boys--photograph taken in



|[?]*AUNI* → *KHOMANI* BUSHMEN

	69	Average	Range	5	38	44	Average	Range
34	4.5 : M.	34	32.534.5	39.5 : F.	39.5 : F.	? 40 : M.		
	193	185.6	174193	175	186	199	180	175199
	134	139	134—143	135	142	148	141.7	135—148
	121.5	120.4	111—125	113	114	120.5	115.8	113—120.5
	140.5	140.9	130—149	144	140	147	143:7	140—147
	97	98.9	99—100	91	98	107	98.7	91107
	115	113	105117.0	101	112	121	111.3	101—121
	133	128.5	119—134	114	123	138	125	114—138
	99-5	98.4	95—101	82	88	94	88	82—94
	49.5	54.1	49.5—61	54	49	53	52	49—54
	104	99.6	94.5—104	88	94	102	94.7	88—102
	24.5	33.9	24.5—41	36	43	42	40.3	3643
	94	92.6	84.5—98	83	92	98	91	83—98
	64	61.4	53.5—65	60	66.5	64	63. 5	6066.5
	38	36.5	3438	33	33	39-5	35.2	3339
	44	40.9	34.5—44	31	38	46	38.3	31—46
	13.5	13.4	8—16	11.5	13	13	12.5	11.5—13
	18	18	13.5—24	15	16	22	17.7	15—22
	53	49.5	45—53	41	50	53	48	41—53
	34	31.3	29.5—34	26	29	33.5	29.5	26—33.5
	57.5	54.1	47.557.5	45	56	58.5	53.2	4558.5
	1554.5	1500.6	1356—1601	1385	1489	1586.5	1386.8	1385—1586.5
	719.5	679.4	571.5—730.5	607	634	721.5	654.2	607—721.5
	849	787. 4	704.5—849	725	762	847	778	725—847
	921	896	817—927	858	891	955	901.3	858—955
	350	<i>333.8</i>	290—355	280	310	330	306.7	280330
	200	190	160—205	160	180	185	175	160—185
	240	232.5	210—245	230	215	230	225	215—330
	230	222.5	215230	225	240	230	231.7	225—240
	180	181.3	170—190	200	190	165	185	165200
	195	186.3	180—195	185	200	195	193.3	185—200
	275	266.3	250280	260	320	270	283.3	260 320

MEASUREMENT'S OF THE

Number	47	48	Average	Range
Age in years and Sex	44.5 : M.	44.5 : F.	44.5	
Maximum cephalic L.	196	194.5	195.3	194.5-196
Maximum cephalic B.	147	137	142	137—147
Auricular Ht. (indirect)	126	122.5	124.3	122.5—126
Auricular Ht. (direct)	147.5	141.5	144.5	141.5—147.5
Minimum frontal width	106	103	104.5	103—106
External biorbital width	120	114	117	114—120
Bizygomatic width	135	130	132.5	130—135
Bigonial width	109	95	102	95—109
Upper facial height	59-5	62	60.8	59.5—62
Total facial height	110	103	106.5	103—110
Internal biocular W.	42.5	43.5	43	42.5-43.5
External biocular W.	98	97	97.5	9798
Interpupillary width	66	61.5	63.8	61.5—66
Nose length	45.5	39-5	44.5	39.5—45.5
Nose breadth	42.5	39	40.8	39-42.5
Nose depth	14.5	17	15.8	14.5—17
Mouth height	13	15	14	13—15
Mouth width	45.5	47	46.3	45.5—47
Ear breadth	23	35	29	23—35
Ear length	63	60	61.5	60—63
Stature	1595	1503.5	1549.3	1503.5—1595
Arm length	705	693	699	693—705
Leg length (trochanteric)	810	781.5	795.8	781.5—810
Leg length (cristal)	929	900	914.5	900—929
Biacromial diameter	340	330	335	330340
Thoracic D. (ant-posterior)	185	185	185	
Thoracic D. (transverse)	245	210	227.5	210245
Intercristal diameter	230	240	235	230—240
Interspinous diameter	180	195	187.5	180195
External conjugate D.	185	195	190	185195
Bitrochanteric diameter	270	285	277.5	270—285

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28	37	52	61	62	Average	Range
49.5 : M.	49.5 : M.	49.5 : F.	49.5 : M.	49.5 : F.	49.5	-
184	196.5	185	195	181	188.3	181—196.5
141	152	140	143	140	143.2	140—152
117	137	125	118.5	94	117.9	94—137
140	149	142.5	139	133	140.7	133—149
105	115	101	103.5	96	104.1	96—115
114	120.5	114	111	106	113.1	106—120.5
134	138	126	131	121	130	121—138
97	103	, 91	91	86	93.6	86—103
57-5	63	54-5	58.5	56	57.9	<i>54.5—63</i>
109	109	99	103.5	99	103.9	99—109
46	39	40	40	38.5	40.7	38.5—46
102	92	94	86.5	83.5	91.6	83.5102
71	68.5	66	61.5	60.5	65.5	60.5—71
44	40	39	39	43	41	39—44
46	41	31	46	38.5	14.9	38—46
18	15	13	15	15	15.2	13—18
19.5	17	14.5	12	18.5	16.3	12—19.5
48.5	60	48	53	41	50.1	4160
37-5	27.5	, a 30	32	36	32.6	27.537.5
56.5	63	59	57	58.5	58.8	56.5—63
1575	1648	1487	1524	1401.5	1527.1	1401.5—1575
698	786.5	658	666.5	639	689.6	639—786.5
86 r	897.5	765	812	758.5	818.8	758.5—897.5
984	1032	899	925	874	942.8	874—1032
350	350	330	360	320	342	320360
195	210	185	210	190	196	185—210
215	240	230	245	225	231	215—245
240	260	220	250	230	240	220—260
185	240	180	185	190	196	180240
185	210	195	195	160	189	160—210
275/	265	285	285	275	277	265—285

MEASUREMENTS OF THE

Number	17	18	Average	Range
Age in years and Sex	54.5 : M.	54.5 : F.	54.5	*******
Maximum cephalic L.	186	178	182	178—186
Maximum cephalic B.	144	137	140.5	137-144
Auricular Ht. (indirect)	132	103	117.5	130—132
Auricular Ht. (direct)	146	137.5	141.8	137.5—146
Minimum frontal width	106	97.5	101.8	97.5—106
External biorbital W.	120	105	112.5	105—120
Bizygomatic width	141	124	132.5	124—141
Bigonial width	102	87.5	94.8	87.5—102
Upper facial height	57.5	51	54.3	5157.5
Total facial height	104	89.5	96.8	89.5—104
Internal biocular width	38	29.5	33.8	29.5—38
External biocular width	104.5	87	95.8	87—104.5
Interpupillary width	66.5	60	63.3	6066.5
Nose length	43	38.5	40.8	38.5—43
Nose breadth	42.5	40.5	41.5	40.5-42.5
Nose depth	13	12	12.5	12-13
Mouth height	18	13	15.5	15—18
Mouth width	49	4 6	47.5	46-49
Ear breadth	30	30	30	Milaylin
Ear length	57	61	59	5761
Stature	1599	1436	1517.5	1436—1599
Arm length	709.5	638	673.8	638709.5
Leg length (trochanteric)	813	745	779	745—813
Leg length (cristal)	994	883	938.5	883994
Biacromial diameter	335	315	325	315—335
Thoracic D. (ant-posterior)	200	185	192.5	185—200
Thoracic D. (transverse)	230	180	205	180230
Intercristal diameter	245	240	242.5	240—245
Interspinous diameter	180	210	·185	180—210
External conjugate D.	190	185	187.5	185190
Bitrochanteric diameter	280	240	260	240—260

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73	15	16	Average	Range	4	58
9.5 : M.	69.5 : F.	69.5 : M.	69.5	/	70-75 M.	80 : F.
594	186	192.5	189.3	186192.5	193	180
149	140	152	146	140—152	144	145
126.5	111	119	115	111—119	133	108
144	143	145	144	143—145		**************************************
106.5	99	110	104.5	99110	101	95
115	102	124	113	102-124	-	-
128	122	139	130.5	122—139	128	122
96	86	109	97.5	86109	105	95
62	52	53-5	52.8	52—53.5	55	50
100	98.5	105	, 101.8	98.5—10 5	98.5	94.5
40	38.5	43.5	· 41	38.5—43.5	35	37-5
83	92	105	98.5	92—105	88	92
	56.5	69	26.8	56.5—96	63.5	63
42.5	37	40	38.5	37-40	44 .	40
41.5	41	42.5	41.8	41-42.5	42	41
9	17	15.5	16.3	<i>15.5—17</i> · · ·	13.5	13.5
20	9	14	11.5	9—14	14	1.95
49-5	54	53-5	53.8	53.554	50	38
36	31	29	30	2931	31	34
67.5	6r	57	59	57—61	53	56.5
1560	1480	1478	1479	1478—1480	1441	1402.5
689	645	705	675	645—705	658	615
871	779	808.5	793.8	779—808.5	769	711
964.5	907	933-5	920.3	907—933.5	883	844
335	315	350	332.5	315—350	290	300
200	180	210	185	180210	225	175
240	215	220	217.5	215220	220	220
230	245	250	247.5	245—250	240	225
195	215	220	217.5	215—220	205	180
195	190	205	197.5	190—205	190	190
285	260	270	265	260—270	280	270

AVERAGE AND RANGE OF

Number	Male Average	Male Range	Female Average	Female Range
Maximum cephalic L.	190.2	177.5-202.5	181.0	174.0—194.5;
Maximum cephalic B.	144.9	134.0—155.0	138.3	131.0-145.03
Auricular Ht. (indirect)	125.8	115.0—137.0	114.4	94.0—131.0)
Auricular Ht. (direct)	144.6	138.0153 0	139.9	130.0—146.0>
Minimum frontal width	105.1	97.0—115.0	98.7	91.0-104.0
External biorbital width	116.0	106.5-124.0	109.2	101.0118.0
Bizygomatic width	134.1	122.5—142.0	122.5	114.0-130.0
Bigonial width	99.7	88.0109.0	89.7	82.0-98.0
Upper facial height	56.2	52.563.0	52.7	47.0—63.0
Total facial height	102.2	94.0—111.0	93.9	84.0-103.0
Internal biocular W.	38.2	24.5—46.0	36.6	29.543.6
External biocular W.	94.2	82.5—105.0	89.9	83.0-97.0
Interpupillary width	63.9	56.5-71.0	60.5	53.0—66.5
Nose length	38.9	31.0—45.5	36.3	32.0—43.0
Nose breadth	42.2	36.5-46.0	37.8	31.0-43.0
Nose depth	14.2	9.0—18.0	12.5	8.0-17.0
Mouth height	18.5	12.0—24.0	17.2	9.0-22.5
Mouth width	49.5	42.5—60.0	45.3	37.5-54.0
Ear breadth	31.7	23.0-37.5	30.8	23.5—36.5
Ear length	57.1	47.0—67.5	52.3	41.0—61.0
Stature	1558.2	1441.0—1648.0	1459.7	1356.0—1594.0
Arm length	704.7	666.5—786.5	641.9	571.5-720.0
Leg length (trochanteric)	824.6	769.0—897.5	769.5	704.5-832.0
Leg length (cristal)	937.9	883.0—1032	892.5	817.0-981.0
Biacromial width	330.0	290.0—360.0	302.9	270.0—335.0
Thoracic D. (ant-posterior)	195.3	165.0—225.0	168.3	140.0-190.0
Thoracic D. (transverse)	236.8	215.0-260.0	215.7	180.0-240.0
Intercristal diameter	233.8	215.0-260.0	228.6	180.0-250.0
Inter-spinous diameter	191.0	160.0-240.0	191.7	165.0-220.0
External conjugate D.	190.6	172.5-200.0	181.9	150.0-225.0
Bitrochanteric diameter	273.5	250.0-290.0	276.0	240.0—320.0

ADULT MEASUREMENTS

10 Inc Bush Average	lividuals Bush Range	10 I Boskop Average	ndividuals Boskop Range	Total Average	Total Range
178.5	174.0—181.0	193.2	186.0—202.5	185.5	174.0-202.5
137.2	132.0—144.0	147.9	142.0—155.0	141.3	131.0-155.0
110.5	94.0—126.0	128.7	119.0—137.0	119.9	94.0-137.0
138.6	130.0—146.0	147.1	144.0—153.0	142.1	130.0-153.0
197.8	91.0-101.0	107.0	98.0—115.0	ior.8	91.0-115.0
107.8	101.0—118.0	117.7	106.5—124.0	112.2	101.0-124.0
19.7	114.0-126.0	134.8	112.5—141.0	127.8	114.0-142.0
88.8	82.0-98.0	101.8	94.0-109.0	94.6	82.0-109.0
53.8	48.5—61.0	57.7	53.063.0	54.4	47.0—63.0
92.1	84.0—99.0	104.5	97.0-111.0	93.4	84.0—111.0
34.8	29.5—38.5	39.0	31.0-43.5	37.4	24.5—46.0
87.3	82.5—96.5	95.8	83.0—105.0	92.0	82.5-105.0
58.3	53.0—64.0	63.8	56.5—69.0	62.1	53.0-71.0
37.0	32.0-43.0	40.3	33.5-45.5	37.5	31.0—45.5
35.9	31.0-40.5	42.4	37.0-46.0	39.9	31.0-46.0
11.2	8.0—14.0	13.7	9.0-16.0	13.3	8.0-18.0
17.2	13.0—22.0	18.9	13.0-22.0	17.9	9.0-24.0
44.1	41.0—52.0	49.2	42.5-60.0	47.4	37.5—60.0
32.5	26.0—39.0	32.8	23.0-37.5	31.3	23.0-37.5
50.7	41.0-61.0	59.6	53.0-67.5	54.6	41.0-67.5
1436.5	1356.0—1529.0	1586.3	1478.0-1648.0	1507.7	1356.0—1648.0
630.1	571.5-720.0	716.3	689.0-786.5	672.4	571.5—786.5
758.6	704.5—806.5	834.9	810.0-897.5	796.4	704.5—897.5
881.4	817.0-942.5	958.1	929.0—1032.0	915.6	817.0—1032.0
297.0	270.0—335.0	344-5	330.0—360.0	324.6	270.0—360.0
166.0	140.0—190.0	194.0	180.0-210.0	181.5	140.0—225.0
209.0	180.0—230.0	239.5	220.0-260.0	226.0	180.0—260.0
225.5	200.0-250.0	239.5	225.0—260.0	232.1	180.0-260.0
188.5	170.0-210.0	198.5	165.0—240.0	191.3	160.0—240.0
180.5	150.0-195.0	193.5	185.0—210.0	188.9	150.0—225.0
265.0	240.0—285.0	277.5	265.0—290.0	274.8	240.0—320.0

Range 2/12-12/12	74.6—83 73.9—86.1 89—11.6 54—71.9 35.6—46 19.7—27.1 79.7—91.8 70.5—89.7 77.1—88.6 52—76.8
Average 7/12	77.6 80 102.7 65.4 43 23.8 86.2 79.5 64.7
JSHMEN 59 12/12: M. P. obtusus B. Bo. B. M. 1-2 4 Nil 17 22 Nil Hyposthen: Nil	83 73.9 89 66.9 49 24.6 82.7 81 77.6
9/12: F. 9/12: F. P. acutus B. 1 1 1 1 1 1 1 Nil Nil Sthenic Nil	75.8 75.8 ————————————————————————————————————
43 43 7/12: F. P. acutus Bo (T.) Bo. Mo. 1 1 1 1 1 1 1 Nil Horizontal Sthenic Nil	/2.4.0NI B) 74.6 86.1 116.3 68.7 43.6 24.3 91.8 75.1 85.8 63.7
NON-METRICAL FEATURES OF THE	INDICES OF THE /2AUNI BUSHMEN 6.3 79.4 74.6 75.8 86.1 — 116.3 — 116.3 — 116.3 71.6 64.2 68.7 71.6 19.7 27.1 24.3 26.1 82.8 91.1 91.8 79.7 82.9 88.6 85.8 77.1 65.7 56.8
ETRICAL F. 31 6/12: F. P. acutus B. B. M 1 1 2 1 Fold 17 17 17 Nil Nil Hyposthen: Nil	1NDICES 76.3 ————————————————————————————————————
NON-M 3 2/12 : F. P. obtusus B. M. 1 1 3 Slight 19 22 11 Slight 19 22 Ist Type Nil Sthemic V. Slight	76.7
Number Age in years and Sex Cranial Form Cranial Type Eacial Type Colouration of Iris ,, of Conjunctiva Ocular Folds Colouration of Face Colouration of External Genitalia Bodily Habitus Ear Lobulation	Cephalic Index Auricular Ht. Index Vertical Index Fronto-biparietal Index Facio-cephalic L. Index Upper facio-cephalic L. L. Facio-cephalic Breadth I. Fronto-bizygomatic I. Bigonio-frontal Index Total facial Index

Upper facial Index	31	31.3	37.5	35.4	43.2	35.7	36	31-43.2
Facial length Index	59.2	46.2	66.7	55.6	56.3	50	55.7	46.2—66.7
Fronto-biorbital Index	1	!	Į	ı	1	1	1	1
Bigonio-bizygomatic I.	62	70.8	62.5	64.5	69.2	62.0	65.3	62-70.8
Interocular-biocular I.	26.9	38.0	1	1	33.I	36.9	33.7	26.9—38.0
External biorbital I.	1	1	ţ		I	1	1	***
Nasal L.—biocular I.	23.1	29.6	1	1	27.5	34.9	28.8	23.1—34.9
Nasal width-length I.	138.9	116.7	1	110	118.2	103.9	117.5	103.9—138.9
Nasal depth-length I.	22.2	1	İ	30	34.1	1	28.8	22.2—34.1
Nasal depth-width I.	91	1	30.8	42.9	34.7	1	31.1	16-42.9
Mouth Index	51.6	65.3	1		1	48	55	48-65.3
Ear Index	2.99	58.2	72.3	2.99	63.8	74.4	67.4	58.2-74.4
Biacromio-stature I.	21.7	23.2	ł	19.3	23	18.7	21.2	18.7—23.2
Bitrochanteric stature I	61	17.4	1	17.6	19.4	16.7	18	16.7—19.4
Intercristal-stature I.	15.3	13.6	1	14.8	15.1	16.3	15	13.6—16.3
Arm length-stature I.	44.7	1	1	43.7	1	1	44.2	43.7-44.7
Leg-stature I (cristal)	50	46.5	1	55.6	54.8	53.6	52.1	46.5—55.6
Leg-stature I; (trochan:)	40.3	1	1	46.4	1	ı	43.4	40.3-46.4
Bitrochanteric-biacrom:	. 48	74.8	86.7	91.2	84.1	89	85.5	74.8—91.2
Intermembral I. (cristal)	89.4	!	1	78.5	Ţ	1	84	78.5—89.4
Intermembral I. (troch:)	110.8	1	-	93.9	ŀ	1	102.4	93.9—110.8
Intercristal-Biacromial	70.4	58.5 ?	78.3	76.7	65.5	87 ?	72.7	58.5—87
Thoracic Index	114.6	113.9	92.6	120	110.3	117.2	6.111	95.6-120
Ext. Conjugate intercri:	76.3	9.98	67.4	80	92.1	78.3	80.1	67.4—92.1
Interspinous-Intercristal	and the same of th	1		1	1	ţ	1	1
Intercristal-Bitrochant:	80.9	78.2	90.2	84	77.9	6.76	84.9	77.9—97.9

	N-NON-N	METRICAL	NON-METRICAL FEATURES OF THE /24UNI BUSHMEN	OF THE	PAUNI BI	USHMEN		
Number	13	46	25	32	34	12	20	26
Age in years and Sex	(Z)	P. obtusus	3 : M.	3:下	3 : F.	4 : M.	4 : F.	رة : يا با
Cranial Form	P. acutus	Nr: ovoid.	. P. acutus	P. acutus	P. acutus	P. acutus	P. acutus	P. sentus
Facial Tena	ei i	B. Bo.		B. Bo.	B. Bo.	Bo.	Bo. B.	B. Bo (M
Beard Type	B. Mo.	B. M? Mo.	Bo. B. Mo.	B. A.	B. A.	B. Mo.	Bo. ?A.	B,
Colouration of L.:	1	Į	1	1	1	ļ	1	1
of Common	ч	I	1—2	1-2	ı	1-2	11	H
Ocular Folds	P4 -	4	64	3	8	ć.	7	64
Colouration of E	Slight	r Fold	I Fold	N:i	2 Folds	r Fold	Ziz	Z
Colouration of A	15	18	91	26	9	91	17	16
Stantonia of Arm	E4 64	56	18	27	18	100	. 00	17
Projection of External	ist (foetal)	3rd ?	3rd Type	3rd Type	3rd Type	3rd Type	1st (infant)	N.
Genitalia	Z	Horizontal	Diagonal	IZ.	Ë	Horizontal	Z	Ž
Bodily Habitus	Sthenic	Sah	Sthenic to	Sthenic to				Sthenic to
Ear Lobulation	Nil		Hyposthen: Nil	Hyposthen:	Hyposthen:	Hyposthen:	Sthenic	Hyposthen
					1111	Ought.	IINI	7117
;		INDICES	INDICES OF THE	PAUNI BU	BUSHMEN			
Amicular III	76.1	76.1	77.9	76.1	73.7	78.9	74.3	76.1
Vertical Index	70.7	1	85.3	84.1	84.5	81.7		81.6
Fronto himming	6.26		109.5	118.6	112.2	103.6	1	107
Facio conhelie I I	74.4	73.6	68.9	71.8	72.4	67.8	76.2	73.8
Upper facio-centralia I	44.6	47.9	43.6	42.9	49.7	43.7	41.1	48.2
Facio-cephalic Bear It	25.1		24.6	24.5	26.5	24.6	1	27.7
Fronto-bigging I.	86.6		82.7	82.3	80.8	77.1	76.9	83.9
Bigonio-frontal Index	83.6		83.3	87.3	89.9	88.2	66	88.3
Total facial Index	79.3	84.5	81.1	84.3	82	83.4	75.8	84.7
TANIT THOU	67.7	75.5	9.29	9.89	81.8	72.2	72	75.7

38.1 56.3
1.96
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Upper facial Index Facial length Index Fronto biorbital Index	42.9 57.8 —	111	40.3 55.4 99.4	36.8—43.5 48.8—57.8 92.6—108.8	43.3 54.2 99.0	46.6 57.1 96.9	37.5 51.9 94.1	38 56.9 95.9
	69.2	75	72.3	66.4—75.0 33.9—41.5	72.1	72.1	70.5	76.9
	- 1	1	32.7	29.7—38.2	33.0	34.6	32.4	34.5
Nasal L.—biocular Index	38.8	t	32.0	24.6-38.8	39.9	36.2	38	39.2
	100.0	ł	113.7	84.6—133.3	95.2	8.901	106.5	113.3
	31.3	1	32.2	19.2-40.0	31.7	42.4	41.9	33.3
	31.3	1	27.4	17.9—32.4	33.3	39.7	39.4	29.4
	51.4	1	21.15	41.1—61.1	55.I	49.3	42.6	58.0
	67.4	-	64.3	56.7-70.5	57.8	1.69	64.0	72.2
	21.0	23.7	20.9	17.3-23.7	21.3	20.6	20.2	22.7
	16.3	17.5	17.5	16.3—18.6	17.5	16.4	16.7	17.8
	14.0	15.2	15.6	14.0-19.8	14.2	15.0	14.5	14.4
Arm length-stature Index	44.6	1	43.3	41.5-44.6	46.4	43.6	45.1	43.1
	58.2	ı	54.7	50.6—58.2	59.5	57.0	59.1	89.2
	50.8	1	49.7	44.1—52.2	52.5	50.2	53.8	52.6
:	9.77	73.9	84.6	73.9—103.7	82.2	79.5	82.6	78.5
	76.7	1	68.2	75.9—80.8	78.0	76.6	76.3	71.2
	87.7	ı	86.5	84.8-87.9	88.4	86.9	83.7	80.1
	66.7	64.1	75.2	64.1—94.5	66.7	72.7	71.7	63.5
	109.5	1	111.0	100-118.5	115.3	123.0	117.2	136.7
	82.6	78.0	78.4	61.8—83.3	93.3	78.1	84.8	81.3
	82.6	79.7	76.4	55.9—83.6	0.06	81.3	81.8	81.4
	86.0	86.8	89.0	83.2—113.3	81.1	91.4	6.98	80.8

	,							
Number	11	99	72	24	42	09	65	55
Age in years and Sex	7 : M.	7 : M.	7 : M.	8 : M.	8 : M.	8 : M.	·· ··	O : FI
Cranial Form	P. acutus	P. acutus	P. acutus	P. acutus	P. acutus	P. acutus	P. acutus	P. obtusu
Cranial Type	Bo. B.	B. Bo.	B. Bo.	B. Bo.	Bo. (T)	Bo, B,	В	R Ro (*)
Facial Type	Bo. A.	B. Mo.	Bo. Mo.	B. Bo, A.	B. Bo. Mo.		B. B. PMo	D MG
Beard Type	J	1	1	1				D. 1410.
Colouration of Iris	7	en	01	(r	N	1-0	, ,	
" of Conjunctiva	4	4	8	. 6	٠ ﴿	1 6	v c	.n e
Ocular Folds	Slight	r Fold	Nil	EZ	Z	2 Folds	FOLD	5 . Ec.14
Colouration of Face	9	9	18	IS	15	9	22	PIO.J I
Colouration of Arm	23	23	17	9	17	0 00	1 6	٠ ﴿
Steatopygal Type	rd Type	? 3rd Type	ıst (infant)	1st (infant)	? 3rd Type	? ard Type	2/ 2nd (infant)	ord Tune
Projection of External Genitalia	Horizontal	Horizontal	Flaccid	Horizontal	Horizontal	Horizontal	li Z	Nii 17pe
Bodily Habirus	Sthenic	Hyposthen:	Sthenic to Hyposthen:	Sthenic to Hyposthen:	Sthenic	Sthenic	Hynosthen Sthenic	Sthanic
Ear Lobulation	Z	Nii	Slight	Z	Z	Nii	Z	
		INDIC	INDICES OF /2.	/2AUNI BUSI	BUSHMEN			
Cephalic Index	79.7	80.4	76.8	20.8	75.0	76.1	76.7	75.6
Auricular Ht. Index	83.7	80.4	77.4	83.1	80.4	77.2	76.7	83.0
Vertical Index	105.1		I 00.7	6.511	107.3	101.5	100.0	117.3
Fronto-biparietal Index	70.8	9.29	73.2	72	71.7	70.8	71.9	72.2
Facio-cephalic L. Index	52	45.4	46.4	48.3	49.7	46.9	47.7	49.4
Upper facio-cephalic L. I.	28.0		27.1	24.9	20.0	27.8	25.3	30.7
Facio-cephalic Breadth I.	80.2		63.8	83.7	84.8	81.8	84.8	83.5
Fronto-bizygomatic I.	88.2	97.6	87.3	86.4	84.6	9.98	84.7	86.5
Bigonio-frontal Index	9.98		79.4	6.77	82.8	81.4	86.6	93.8
Total facial Index	× ×	260	. 0 9		. 01			

48.6	62.1	0.96	81.1	36.2	34.0	37.2	102.9	37.1	36.1	51.2	0.09	1.61	15.0	13.3	42.4	52.7	60.5	78.3	70.0	58.0	9.69	130.7	75.0	81.3	88.9
38.7	53.0	6.16	73.1	36.5	31.1	32.0	125.9	32.8	26.0	50.0	62.9	21.3	8.91	13.7	44.7	54.0	0.09	1.64	77.4	82.6	64.5	124.1	86.4	78.8	81.5
44.7	59.2	87.4	70.5	37.0	28.8	34.7	115.0	26.7	23.2	47.4	62.0	18.8	1.91	13.7	39.4	49.7	57.4	85.2	9.89	77.4	72.6	115.8	80.7	78.0	85.2
44.0	56.3	93.4	70.1	39.2	32.4	39.2	100.0	31.9	31.7	52.4	59.6	19.3	9.91	14.6	46.0	51.9	59.1	85.7	77.9	88.5	75-5	115.6	83.8	81.1	88.1
43.6	57.8	59.0	67.3	42.6	37.5	33.0	127.6	37.0	29.7	44.9	0.09	20.1	17.4	14.3	43.9	50.1	58.2	86.7	74.0	85.9	71.1	117.2	81.3	81.3	82.1
42.1	54.9	98.5	69.3	36.9	30.7	41.1	97.1	30.4	31.3	35.4	65.7	21.9	17.2	15.8	44.2	52.6	58.9	78.7	75.0	84.1	72.4	9.911	76.5	88.0	6.16
41.7	54.1	626	80.4	40.0	33.2	38.3	1.801	29.0	26.9	48.1	58.0	22.6	16.9	14.9	43.2	51.0	59.1	75.0	73.2	84.7	65.8	115.7	79.1	83.9	87.8
42.6	53.6	102.1	77.1	43.0	39.0	33.1	131.6	38.6	29.3	45.2	53.7	20.6	17.1	14.0	42.0	51.0	58.3	82.9	73.6	84.1	1.89	113.3	81.3	81.3	82.1
Upper facial Index	Facial length Index	Fronto-biorbital Index	Bigonio-bizygomatic I.	Interocular-biocular I.	External biorbital I.	Nasal Ibiocular I.	Nasal width-length I.	Nasal depth-length I.	Nasal depth-width I.	Mouth Index	Ear Index	Biacromio-stature I.	Bitrochanteric stature I.	Intercristal-stature I.	Arm length-stature I.	Leg-stature I. (cristal)	Leg-stature I. (trochan:)	Bitrochanteric biacram:	Intermembral I. (cristal)	Intermembral I. (troch:)	Intercristal-Biacromial	Thoracic Index	Ext. Conjugate intercri:	Interspinous-Intercristal	Intercristal-Bitrochant:

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ON-METRICAL FI
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Range & CAUNI BUSHMEN	10: M. 10: M. 7.1 5-10 11. E	s P. obtusus	B. Bo R B. D. C. T.	h-1		3 22	4	Nii	13 6 12 16	23 23 17 10	3rd Type 3rd Type 3rd Type 1st (infant) 1st (infant)	Communication of the state of t	Diagonal European Wattle	c Hyposthen: Sthenic	I'N I'N JURING	INDICES OF /2 AUNI BUSHMEN	73.5 76.6 71.5—82.4 73.3 73.9 72.4	81.1 80.6 75.0—89.1 81.7 71.7	97.9 110.3 106.3 97.9—117.3 111.4 97.0 107.5	70.9 71.3 71.4 67.6—73.2 76.6 71.1 72.4	x 45.1 46.5 47.6 43.1—52.0 47.8 46.9 46.8	; I: 26.1 23.3 26.3 22.6—30.7 27.8 25.6 26.2	I: 83.0 83.1 81.9 73.0—84.8 87.9 88.7 91.0	: 94.9 85.8 87.9 84.6-94.9 87.1 80.4 80.3	73.4 83.5 83.0	76.1 75.9 66.7816 72.1
40			Bo. B. (T.+M)	B. Bo. N. Bo	ļ	8	4	Ē					Horizontal Di	V. Slight Ni												
Number	Age in years and Sex	Cranial Form	Cranial Type	Facial Type	Beard Type	Colouration of Iris	" of Conjunctiva	Ocular Folds	Colouration of Face	Colouration of Arm	Steatopygal Type	Projection of External	Centalia Rodily Habitus					Index			×		.: -		dex	Total facial Index

	M-NON-M	ETRICAL	NON-METRICAL FEATURES OF THE 2411NI BIISHMEN	THE 24IIVI	RITCHARM		
Number	6	57	Average Denge	7	MINIMEN	i	
Age in years and Sex	13 : F.	M.		, ,	49	54	39
Cranial Form		. acutus		10 : F.			18 : F.
Cranial Type	Bo. B. (br) Bo. B. (br)	30. B. (br)		F. acutus	ns	P. acutus	P. acutus
Facial Type	B. M. ?Bo Bo. Mo. M.	Bo. Mo. M.		(Dr.)	Б. Бо.	B. Bo. (t)	B. Bo. (t)
Beard Type	1			D. 73.	B. M. Bo.	B. Bo. Mo.	Bo. B. M.
Colouration of Iris	7	•		employee	1	ţ	1
" of Conjunctiva	1 64	t c		m	60	3	3
Ocular Folds	,	•		7	m	3	£
	V. Slight 2	2 Folds		MIN	I Fold	i	
Colouration of Face	17	14		III.	IZ.	I Fold	V . Slight
Colouration of Arm	21	17		0	16	12	61
Steatopygal Type	ist (infant) and Type	nd Tvne		27	20 .	17	17
Projection of External		Concave		ist Type	3rd Type	1st Type	ıst Type
Genitalia Rodily Habitus	Wattle	Upwards		Wattle	European	Butterfly	Butterfly
	Hyposthen: Sthenic	thenic		Herocehoe	Sthenic to		Sthenic to
Ear Lobulation				rishnemen	Typosmen: Hyposthen: Hyposthen:	Hyposthen:	Hyposthen
	N. I.N.	V. Slight		V. Slight	Nil	Z	pierced
Cephalic Index) () ()	INDIC	INDICES OF /2 AUNI BUSHMEN	BUSHMEN			

	78.3	76.1	97.2	72.2	50.5	26.9	68.9	89.3	92.3
	80.6	77.2	95.9	6.60	46.9	20.2	6.00	80.2	50.8
	76.0	81.6	107.4	0.00	0.00	6/2	2 6	4.67	69.4
USHMEN	76.7	79.0	103.0	47.7	27.6	84.4	87.7	71.0	73.7
OF /2AUNI B	72.4-80.0	71.7—81.7	70.8—76.6	46.8—52.5	25.6-30.5	83.5-91.0	80.3-87.1	76.2-97.4	71.0-81.1
NDICES OF	75.7								
	76.1	75.0	75.7	48.4	26.4	87.1	6.98	8.98	01.1
	78.5	79.0	71.9					76.2	75.9
	Cephalic Index	Vertical Index	Fronto-biparietal Index	Facio-biparietal Index	Facio-cephalic L. Index	Upper facio-cephalic L.	facio-cephalic Breadth I.	ronto-bizygomatic I.	Sigonio-frontal Index

38.7	53.2	80.7	1:60	75.0	41.2	32.3	40.7	96.0	37.0	39.4	40.0	55.8	21.1	20.8	16.2	43.2	59.8	78.1	50.7	9.101	72.3	85.2	4.67	145.5	90.0	0.00	
37.3	#2.A	F-66	93.4	71.4	37.9	31.5	38.0	125.4	29.4	26.3	35.6	71.4	22.0	18.6	17.5	43.3	6.19	91.2	55.3	83.9	6.69	78.2	79.0	146.6	75.5	9.18	
10.7	1	57.1	95.2	73.0	36.3	33.7	33.7	113.9	43.1	37.8	43.2	62.0	21.9	18.6	16.4	47.1	61.6	87.7	52.7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	76.4	89.2	74.6	129.4	78.0	80.0	
0 0	43.0	57.7	84.7	71.0	37.4	27.9																			85.4		
300 466	39.0	54.4-61.4	91.3-97.1	66 4-78 3	35 6 41.3	30.8-35.5	30 6 40 7	88 0-140 4	28 8-45.6	250 43.8	40 0 -60.5	500-71.8	20.0	16.2 18.4	127 15 2	13.7—13.0	43.6 43.0	29.2-02.1	80.0-69.4	20.9—33.2	71 750	70.2 87.1	64.0—75.0	1166-1354	75 5—83.3	71 4-90.0	
	41.7	56.5	03.3	0.00	20.2	33.6	27.5	27.7	33.3	20.7	72.7	40.7	0.70	20.3	17.5.	14.9	44.8	0.19	85.3	53.6	83.0	73.5	85.0	120 6	78.0	01.7	£:70
	39.8	54.5	0.10	93.7	75.4	40.0	32.9	37.0	107.4	45.0	42.5	60.5	58.7	20.6	17.1	14.9	44.5	59.6	82.8	74.6	83.4	72.4	132.3	77.2	71.4	87.5	53.3
	9.97	61.4	4.10	93.5	66.4	41.3	35.5	37.5	105.8	31.9	30.1	43.5	71.8	21.0	18.4	15.0	45.6	62.6	87.5	72.5	83.1	71.4	131.0	75.5	0.06 (81.6	54.8
	Haner facial Index	Cppel lacial mice	Facial length index	Fronto-biorbital Index	Bigonio-bizygomatic I.	I nterocular-biocular I.	External biorbital I.	Nasal Lbiocular I.	Nasal width-length I.	Nasal depth-length I.	Nasal depth-width I.	Mouth Index	Ear Index	Biacromio-stature I.	Bitrochanteric-stature I.	Intercristal-stature I.	Arm length-stature I.	Leo-stature I: (cristal)	Leg-stature I: (trochan:)	Bitrochanter-biacromic:	Intermembral I. (cristal)	Intermembral I. (troch:)	Intercristal-Biacromial I:	Thoracic Index	Ext. Conjugate-(intercri:	Interspinous-Intercristal	Intercristal-Bitrochant:

	NON-MET	FRICAL FE	ATURES O	NON-METRICAL FEATURES OF THE 12 BUSHMEN	IUNI BUS	SHMEN		
Number	51	20	21	30	Average	Range	61	45
Age in years and Sex	18 : F.	19 : M.	19 : F.	20. F.	18.1		25—: M.	25- : F.
				1				P. obtusus
Cranial Form	P. obtusus	P. obtusus	P. obtusus	P. acutus				INF: OVOIG
Cranial Type	B. (br)	B. (T+m)	B. Bo.	B. Bo.			E E	œ.
Facial Type	Bo. ? M.	Bo. B. M.	B. Bo. N.	B. Bo. M.			Bo. Mo.	B. Mo. Bo.
Beard Type	1	1	I	1			Mo.	I
Colouration of Iris	m	re	I	ĸ			8	6
., of Conjunctiva	73	13	m	H			ı	e
Ocular Folds	Z.	Slight	Ξ̈̈́Z	Slight			Slight	Z
Colouration of Face	9	21	10	91			91	91
Colouration of Arm	24	23	23	00 I			ç	201
Steatopygal Type	and Type	3rd Type	ıst Type	and Type			1st Type	and Type
Projection of External	Butterfly	Flaccid	Wattle	Wattle			Horizontal	Wattle
Bodily Habitus	Hyposthen: Sthenic	Sthenic	Sthenic to Hyposthen:				Sthenic	Sthenic
Ear Lobulation	1	Z	Nil	Nil			II'N	V. Slight
		INDICE	ES OF /PAU	INDICES OF /2 AUNI BUSHMEN	IEN			
Canhalic Index	76.0	78.1	74.9	74.0	8.92	74.0—80.6	75.3	75.7
Auricular Ht. Index	79.3	78.7	81.7	85.1	8.62	76.1—85.1	75.8	74.6
Vertical Index	104.4	100.7	109.2	116.7		95.9—116.7	100.7	105.8
Fronto-hinarietal Index	73.5	73.4	73.3	73.5		69.6—73.5	77.2	73.7
Focio-cenhalic L. Index	52.9	55.4	52.3	51.9		47.7—55.4	53.3	51.9
Hange facio-cephalic L : I :	31.0	29.6	28.1	27.6		26.2—31.8	29.1	27.6
Escio-cenhalic breadth I:	84.6	89.9	8.06	93.3	88.9	84.4-93.3	96.4	89.8
Feores-hizvoomatic I:	87.0	81.6	83.2	78.8	82.4	78.8—87.7	79.7	02.1
Risonio-frontal Index	91.0	86.3	86.9	89.3	87.4	71.9-92.3	94.3	97.0
Total facial Index	80.9	78.1	6.94	75.2	74.3	60.4-80.9	73.4	76.4

Upper facial Index	49.7	42.0	41.2	40.0	41.4	37.3 49.7	40.2	40.7
Facial length Index	61.3	53.8	53.6	53.2	55.4	53.2—61.3	54.6	53.2
Fronto-biorbital Index	94.3	92.3	88.1	1	1.16	84.7—95.2	92.2	2.06
Bigonio-bizygomatic I:	79.1	70.4	72.3	70.4	72.9	70.4—79.1	75.8	79.7
Interocular-biocular I:	35.8	42.9	44.3	37.9	39.2	35.8-44.3	38.3	43.6-
External biorbital Index	32.1	33.9	35.3	ł	32.4	27.9—35.3	30.4	33.5
Nasal L.—biocular Index	44.2	41.1	35.6	33.7	38.2	33.7-44.2	33.9	48.3
Nasal width-length I:	90.5	101.4	122.6	128.1	110.5	90.5—128.1	125.8	83.1
Nasal depth-length I:	23.8	44.5	46.7	34.4	36.4	23.8—46.7	45.2	20.5
Nasal depth-width I:	26.3	43.8	38.2	26.8	33.5	26.3—43.8	35.9	24.6
Mouth Index	32.7	53.0	50.0	46.7	47.1	32.7-53.0	55.8	39.8
Ear Index	66.7	9.09	55.9	47.5	60.4	47.5—71.4	50.5	65.8
Biacromiq-stature Index	18.9	21.7	23.0	20.8	21.1	18.9—23.0	22.5	20.8
Bitrochanteric-stature I:	17.9	17.0	19.5	18.4	18.8	17.0-20.8	17.5	17.1
Intercristal-stature I:	13.8	14.3	15.7	14.6	15.4	13.8-17.5	13.8	15.7
Arm length-stature Index	42.8	45.9	44.8	45.I	44.5	42.8—47.1	43.9	42.8
Leg-stature I: (cristal)	59.0	60.2	62.0	62.4	61.4	59.8—63.1	8.09	61.5
Leg-stature I: (troch:)	53.3	53.2	54.6	55.4	53.6	50.7—55.4	54.6	52.7
Bitrochanteric-Biacrom:	94.6	78.5	84.9	88.3	1.06	78.5—103.7	77.8	81.9
Intermembral I: (cristal)	71.5	76.2	72.1	72.3	72.5	69.3—76.4	72.3	69.6
Intermembral I: (troch:)	80.4	86.2	82.0	81.4	83.0	78.2—89.2	80.4	81.2
Intercristal-biacromial I:	72.7	66.2	68.2	70.0	73.3	66.2—79.4	61.4	75.4
Thoracic Index	142.9	136.4	146.7	131.3	137.4	120.6—146.7	120.5	131.2
Ext. conjugate—(intercri:)	75.0	80.2	75.6	80.0	80.0	75.0-90.0	6.06	80.4
Interspinous-intercristal	85.0	79.1	73.3	88.1	82.9	73.3—88.1	72.8	82.6
Intercristal-bitrochant:	6.94	84.3	80.4	79.2	81.4	73.2—91.2	78.6	92.0

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	NON-M	ETRICAL	FEATURE	S OF 7	THE PAUN	NON-METRICAL FEATURES OF THE /AUNI BUSHMEN		
Number	53	74	2/2			2	14	23
Age in years and Sex	25- : M.	25- : M.	25- : M.	Average		, j	70. M	7
Cranial Type	P. obtusus	P. obtusus	P. acutus		22—23	P. obtuene	D ohtnens	D obmone
Cranial Form	Bo. (T)	Bo. (t)	Bo.			R Ro (t)	Bo B (+)	T. colustas.
Facial Type	Bo. M.	Bo. ? Mo.	Bo. M.			N No N	B Mo	a a
Beard Type	Shaven	Shaven	M.				Mo	.or .d
Colouration of Iris	7	m	3-4			·		· •
" of Conjunctiva	7	· 67	- R*			i ,	າ :	, to
Ocular Folds	Nii	r Fold	r Fold			ר ביי ביים	Slight	* 5
Colouration of Face	20	22	9				ongine 6	1117
Colouration of Arm	9	17	81			77	> 5	10
Steatopygal Type	3rd Type	2nd Type	1st Tvne			4.3 Prof. Think	23	10
Projection of Exernal		240	adr			zna 1 ype	ısı ıype	ıst Type
Genitalia	Diagonal	Diagonal	Flaccid			Furonean	Howingstol	***************************************
Bodily Habitus	Sthenic	Sthenic	Asthenic			Hyposthen .	•	Wattle
Ear Lobulation	Ziil					. Tableanen		Typostnen
	Pierced	Slight	Nil			Nii	V. Slight	Slight
		INDIC	INDICES OF /2	/PAUNI B	BUSHMEN			
Cephalic Index	77.3	75.4		0.92	75.3—77.3	79.2	22.7	22.0
Auricular Ht. Index	77.8	75.9	82.3	77.3	74.6-82.3	70.0	00 200	76.3
Vertical Index	100.7	100.7			100.7-114.8	90.3	102.0	104 6
Fronto-biparietal Index	71.9	71.5		72.7	69.0-77.2	70.1	74.4	75.0
Facio-cephalic Length I:	51.3	55.2		53.2	51.3—55.2	54.1	. 0.0	7.13
··		30.1	30.4		27.6-30.4	33.7	28.6	30.5
		7.16		91.2	86.3-96.4	84.0	93.6	00.2
••	78.4	78.0	79.7	9.6	78.0—82.1	83.5	76.9	82.5
dex	102.0	92.6	98.0	97.4	94.3-102.0	86.1	92.0	80.40
lotal facial index	72.4	9.62	82.1	8.92	72.4—82.1	81.0	66.2	77.5

1.

Ilnner facial Index	8.12	43.6	46.0	44.5	40.2—51.5	50.4	37.3	47.5
Facial lenoth Index	54.6	54.5	55.0	54.6	53.2—55.9	62.2	56.4	61.3
Fronto-biorbital Index	01.3	87.6	92.0	90.7	87.692.2	85.6	1	0.00
Bigonio-bizveomatic I:	76.9	74.3	78.1	77.0	74.3—79.7	6.17	73.2	70.0
Interocular-biocular I:	36.9	 	35.2	38.6	35.2—43.6	38.1	43.2	46.1
External biorbital Index	30.4	31.2	29.1	30.9	29.1—33.5	29.7	-	34.5
Nasal L.—biocular Index	35,3	40.4	43.8	40.3	33.9—48.3	37.0	35.8	43.6
Nasal width-length Index	125.4	113.2	1.96	108.7	83.1—125.8	94.1	120.6	108.3
Nasal depth-length Index	40.3	42.1	39.0	37.4	20.5—45.2	32.4	32.4	33.3
Nasal depth-width Index	32.1	37.2	40.5	34.1	24.6-40.5	34.4	26.8	30.8
Mouth Index	47.7	46.8	51.8	53.0 %	39.8—79.1	50.0	28.9	40.5
Ear Index	64.0	64.2	57.0	60.5	50.5-65.8	78.0	60.4	2.65
Biacromio-stature I:	22.3	22.7	20.6	21.8	20.6-22.7	20.6	22.7	1.61
Bitrochanteric-stature I:	17.3	18.3	17.8	17.6	17.1—18.3	17.2	18.0	18.4
Intercristal-stature I:	15.4	14.2	14.6	14.7	13.8—15.7	15.1	14.7	15.7
Arm length-stature [:	44.1	43.5	44.5	43.8	42.8 44.5	43.0	45.5	45.9
Leo-stature I : (cristal)	58.6	59.3	59.7	0.09	58.6—61.5	59.8	1.65	9.19
I co-stature I: (troch)	52.1	51.8	51.8	52.6	51.8—54.6	51.7	54.3	53.4
Bitrochanteric-biacrom:	77.5	80.6	86.4	80.8	77.5—86.4	83.3	79.4	96.4
Intermembral I: (cristal)	75.3	73.3	74.5	73.0	69.6-75.3	71.9	76.9	8.69
Intermembral I: (troch)	84.6	83.9	85.9	83.2	80.4—85.9	83.1	83.7	80.3
Intercrietal-hiscromial I:	60.0	62.5	71.2	67.9	61.4-75.4	73.3	64.7	82.2
Thoracic Index	128.0	140.5	127.7	129.8	120.5-140.5	135.4	131.5	9.211
Ext comments—(intercri :)	74.5	84.4	80.9	82.4	75.5—90.9	84.1	86.4	00. 4.00
Interening - intercristal	85.7	88.9	83.0	82.6	72.8—88.9	88.6	77.3	78.3
Intercristal-bitrochant:	89.1	77.6	82.5	84.0	77.6-92.0	88.0	81.5	85.2

NON-METRICAL FEATURES OF THE /2 AUNI BUSHMEN

29 70 75 Average Range 30—: F. 30—: F. 30—: M. 30—: M. 28.5 27—29.5 P. acutus P. obtusus P. obtusus
Bo. B. Bo. (T+M) Bo. B. Bo. B. Bo. B. Mo. N. Bo. M. N. — M.
(7) N
IIN ST
and Type 1st Type
Sthenic to Hyposthen: Sthenic
Nil Nil pierced
INDICES OF /2AUNI
74.1
78.4
105.8
74.5
53.5
20.5
94.2
78.7
90.6
26.8

0.66 79.4

44.5	56.1	94.2	82.4	39.1	31.4	33.8	93.2	21.6	23.4	30.0	62.1	21.4	20.6	9.91	42.1	60.3	51.9	9.96	70.0	81.1	77.6	131.3	84.4	75.6	80.4
47.7	62.2	87.0	74.2	39.4	32.2	39.4	110.8	43.2	39.0	51.1	2.6	23.8	17.4	14.8	46.7	9.19	53.3	73.2	75.7	87.5	62.0	114.6	81.8	86.3	84.6
37.3—50.4	53.1—62.2	85.6—91.0	70.0—77.2	37.1—46.1	29.7—34.5	33.9—43.6	94.1—136.5	29.8—42.7	25.6—37.6	28.6-50.0	56.3-78.0	19.1—23.4	17.2—20.1	14.5—15.7	42.9 46.0	58.4—61-6	50.9—54.3	74.7—96.4	8.82—8.69	80.3-90.3	64.7—82.2	117.6—135.4	77.6—86.4	77.3—89.1	78.1—88.0
43.0	57.0	88.7	72.3	41.4	32.4	39.5	112.4	34.7	31.1	38.8	I'19	21.4	18.2	15.2	44.3	6 0.1	52.4	85.3	75.2	84.7	71.1	129.4	83.7	84.2	83.5
43.5	54.9	1	77.2	43.7	1	42.6	103.6	29.8	28.7	42.1	56.3	22.3	17.6	15.2	46.0	58.4	50.9	79.2	78.8	90.3	1.89	130.7	77.6	9.18	86.0
39.6	56.3	1	71.1	40.1	1	42.3	110.4	37.7	34.1	28.6	57.3	23.4	17.5	15.2	45.2	59-3	50.9	74.7	76.3	88.7	64.8	124.3	82.6	89.1	8.08
41.9	54.5	88.3	71.3	41.5	34.2	41.c	113.3	42.7	37.6	44.5	59.0	21.0	20,1	15.7	44.0	61.5	52.2	95.5	71.6	84.3	74.6	133.3	84.0	86.0	78.1
40.8	53.1	0.19	71.2	37.1	31.1	33.9	136.5	34.9	25.6	37.1	57.5	20.7	18.4	14.5	43.4	61.3	53.2	88.9	70.8	82.8	6.69	I33.3	86.4	88.6	78.6
Upper facial Index	Facial length Index	Fronto-biorbital Index	Bigonio-bizygomatic I.	Interocular-biocular I.	External biorbital I.	Nasal 1biocular I.	Nasal width-length I.	Nasai depth-length I.	Nasal depth-width I.	Mouth Index	Ear Index	Biacromio-stature I.	Bitrochanteric-stature I.	Intercristal-stature I.	Arm length-stature I.	Leg-stature I: (cristal)	Leg-stature I: (troch:)	Bitrochanteric-biacrom:	Intermembral I. (cristal)	Intermembral I. (troch:	Intercristal-Biacrom I.	Thoracic Index	Ext. Conjugate intercri:	Interspinous-Intercristal	Intercristal-Bitrochant:

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	NON-ME	RICAL FE	ATURES	NON-METRICAL FEATURES OF THE 12 AIINI RIISHMEN	ATINI RITS	HMEN		
Number	22	69	Average	Pance	4	30	Š	A
Age in years and Sex	M . — 25	74 .	24	ognavi	ט נ	20	şi	Average
Cranial Form	D obersess	35 - 1VI.	₩	34.3—34.5	32.3—34.5 40— : F.	40- : F.	40- : M.	
Transis T.	r. optusus	r. acutus			P. acutus	P. acutus	P. obtusus	
Orania 1 ype	Bo. B. (1)	B. Bo. (T+M)	G		B. Bo.	Bo. B. (t)	Bo.	
Facial Tyne	D. A	(Au) Bo			!			
David Th	. v .o.	Mo. f M.			B. M. ?Bo.	Bo. B. M.	Bo. ? M.	
Beard 1 ype	Ä.	ĭ.			1	i	?Bo.	
Colouration of Iris	3	3-4			4	re	~	
" of Conjunctiva	73				- 1	, 4	, "	
Ocular Folds	Nii	Nii			, iz	2	i iz	
Colouration of Face	222	20			90	10	100	
Colouration of Arm	33				2	61	/*	
Steatonymal Trime	? E	77			27	100	29	
Desires of Type	ıst Type	ıst Type			ıst Type	ıst Type	and Type	
Projection of External	i							
Gentalia	Diagonal	Flaccid			Wattle	Wattle	Flaccid	
Bodily Habitus	Sthenic	Sthenic			Hyposthen:	Hyposthen: Hyposthen: Hyposthen	Hyposthen	
	Z					4	V. Slight	
Ear Lobulation	pierced	Slight			Nii	V. Slight	pierced	
		INDICES	OF 124	INDICES OF 12 411MI BIISHMEN	KEN			
:		77777	7.7	NITE DOG TATO	ALCIN			
Cephalic Index	73.9	69.4		69.4—80.5	77.2	76.4	74.4	26.0
Auricular Ht. Index	79.3	73.1	76.1	73.1—79.3	82.3	75.3	73.9	77.2
Vertical Index	107.2	105.2	5.101	92.9—107.2	99.3	98.6	99.3	1.66
Fronto-biparietal Index	71.6	79.1	72.8	1.62-6.69	67.4	1.69	72.3	9.69
Facio-cephalic length I:	54.3	53.9	53.8	52.7—54.3	50.3	50.5	51.3	50.7
Upper facio-cephalic L. I:	28.0	25.6	21.8	25.6-32.8	30.9	26.3	36.6	27.9
Facio-cephalic breadth I:	96.4	99.3	95.6	85.0-99.3	84.5	9.98	93.3	88.1
Fronto-bizygomatic I:	74.3	79.7	78.8	74.3—83.2	79.8	79.7	77.5	79.0
Bigonio-frontal Index	101.5	93.9	97.4	93.9—101.5	90.1	8.68	87.9	89.3
Total facial Index	76.1	78.2	77.6	76.1—79.4	77.2	76.4	73.9	75.8
					A 2		To a division in the last of t	



Plate 106.

Larva (above) and Cocoon
(below) of Diamphidia simplex

Peringuey x 1.3.



	89.4	55.2	88.7	70.5	44.3	36.2	38.7	108.5	35.7	33.2	42.7	55.6	20.6	1.61	15.6	44.0	9.09	52.4	92.6	72.5	84.0	75.8	129.1	83.4	79.9	82.2
1 1	45.5	52.0	88.4	1.89	42.9	347	40.3	116.5	32.9	28.3	41.5	57.3	20.8	17.0	14.5	45.5	60.2	53.4	%.1%	75.6	85.I	69.7	124.3	84.8	71.7	00.5.2
	38.4	52.I	87.5	71.6	46.7	38.4	35.9	115.2	39.4	34.2	50.0	81.8	20.8	21.4	1.91	42.6	59.8	51.2	103.2	71.2	83.2	77.4	119.4	83.3	79.2	75.0
	47.4	61.4	1,06	71.9	43.4	35.6	40.0	93.9	34.8	37.1	36.6	57.8	20.2	18.8	16.2	43.8	6.19	52.8	92.9	70.8	83.7	80.4	143.7	82.2	88.9	86.5
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	37.2-47.7	47.6-62.2	84.3—94.2	74.2—82.4	26.1—41.8	21.3—35.1	33.8-40.4	93.2-129.4	21.6-47.1	23.4—39.0	30.0-51.1	54.8—62.1	21.2-23.8	15.6-20.6	13.4—16.6	42.1—46.7	57.9—61.6	50.0-54.6	73.2—96.6	70.0—78.8	81.1—91.2	62.0—77.6	114.6—131.3	81.8—84.8	75.6—86.3	80.4—86.0
	47.4	54.5	87.6	7.92	36.6	30.0	37.1	112.3	36.9	32.4	36.6	57.9	22.2	17.8	14.9	45.2	59.8	52.5	\$0.4	75.7	1.98	1.79	122.9	83.7	9.18	83.7
	37.2	47.6	84.3	74.8	26.1	21.3	40.4	115.8	35.5	30.9	34.0	1.65	22.5	17.7	14.8	46.3	59.2	54.6	78.6	78.1	84.7	65.7	120.0	84.8	78.3	83.6
	40.0	52.0	85.0	75.4	41.8	35.1	34.7	129.4	47.1	36.4	31.1	54.8	21.2	15.6	13.4	45.6	57.9	50.0	73-5	78.8	91.2	63.2	125.6	83.7	86.0	86.0
	Upper facial Index	Facial length Index	Fronto-biorbital Index	Bigonio-bizygomatic I:	Interocular-biocular I:	External biorbital Index	Nasal Lbiocular Index	Nasal width-length Index	Nasal depth-length Index	Nasal depth-width Index	Mouth Index	Ear Index	Biacromio-stature I:	Bi-trochanteric-stature I:	Intercristal-stature I:	Arm length-stature I:	Leg-stature I: (cristal)	Leg-stature I: (troch)	Bitrochanteric-biacrom:	Intermembral I: (cristal)	Intermembral I: (troch)	Intercristal-biacrom: I:	Thoracic Index	Ext. conjugate (intercri:)	Interspinous-intercristal	Intercristal-bitrochant:

52 50—: M. 50—: F. P. obtusus P. obtusus Bo. (t) (br) B. Bo. (T) Bo. A. Bo. B. A. A. — 3 2 3 Nil Nil Nil 18 6 6 6 2a 1st Type 1st Type	Butterfly	Hyposthen	Nil
37 50—: M. P. obtusus Bo. (t) (br) Bo. A. A. 3 2 Nil 18 6	Flaccid	Sthenic	Slight
BUSHMEN 28 50—: M. P. acutus B. Bo. B. PM. M. 2 3 1 Fold 6 27 1st Type	Flaccid	Hyposthen:	pierced
Range			
OF THE // Average 44.5			
NON-METRICAL FEATURES OF THE /2 AUNI BUSHMEN Range 47 48 Average Range 28 44.5—: M. 44.5—: F. 44.5 P. acutus Bo. (br) Bo. B. (T) Bo. A. Bo. M. M. — 3 I 3 I 5 So—: M Ro. B. (T) Bo. Bo. Bo. Bo. B. (T) Bo.	European	Hyposthen: Hyposthen:	pierced
## 44.5—: M. P. acutus Bo. (br) Bo. A. M. 3 Nil 21 6 6 3rd Type	Flaccid Sthenic to	Hyposthen: Slight	pierced
NON-IN-Range			
Number Age in years and Sex Crand Form Cranial Type Facial Type Beard Type Colouration of Iris of Conjunctiva Ocular Folds Colouration of Face Colouration of Arm Steatopygal Type Projection of Exernal	Bodily Habitus	Ear Lobulation	

T

	75.7	77.3	102.1	72.2	53.5	29.5	90.0	200.1	- 01
	79.2	77.6	98.0	75.7	56.8	32.I	90.0	80.6	404
	26.6	76.1	99.3	74.5	59.2	31.3	78.4	92.4	, TO
BUSHMEN			7				78.5—79.2		
/AUNI	72.7	74.2	102.2	13.1	31.2	93.4	5 79.2 78.9	97.5	80.3
DICES OF	70.3	72.8	103.7	7.00	31.0	94.9	79.2	92.2	79.2
	75.	75.	72.	46.	30.	91.	78.	102.8	81.
7 7 7	73.0 33.0	08 6 00 3	67.4—72.3	50.3—51.3	26.3—30.9	84.5-93.3	77.5—79.8	23.0 20.1	13.9-11.2
Cephalic Index	Auricular Ht. Index	Vertical Index	Fronto-biparietal Index	Facio-cephalic L. Index	Upper facio-cephalic L. L.	Facio-cephalic Breadth I.	Piconio francia I.	Total facial Index	WARREN THE PARTY AND ADDRESS OF THE PARTY AND

43.3	55.I	98.6	72.2	42.6	35.I	41.5	4.76	33.3	34.2	30.2	50.8	22.0	19.2	14.8	44.3	60.5	51.4	86.4	73.2	86.0	66.7	124.3	98.6	81.8	77.2
45.7	57.8	95.4	74.6	42.4	32.4	43.5	102.5	37.5	36.6	28.3	43.7	21.2	1.91	15.8	47.7	9.29	54.5	75.7	76.2	87.6	74.3	114.3	80.8	92.3	98.1
42.9	52.8	92.1	72.4	45.1	40.4	43.1	104.5	40.9	39.1	40.3	4.99	22.2	17.5	15.2	44-3	62.5	54.7	78.6	70.9	81.0	9.89	110.3	77.1	77.1	87.3
44.1-47.7	54.1—60.2	88.3—90.4	73.1—80.8	43.4 44.9	35.4-38.2	40.7—46.4	93.4—98.7	31.9-43.1	34.1-43.6	28.6—31.9	36.5—58.3	21.3-21.9	16.9—19.0	14.2—16.0	44.2-46.1	58.2-59.9	50.8—51.9	79.4—86.4	75.9—77.0	87.0—88.6	67.7—72.7	113.5—132.4	80.4-81.2	78.3—81.3	84.2—85.2
45.9	57.2	89.4	76.9	44.2	36.8	43.6	1.96	37.5	38.9	30.3	47.4	21.6	17.9	15.1	45.2	59.1	51.4	82.9	76.5	87.8	70.2	122.9	80.8	79.8	84.7
47.7	60.2	90.4	73.1	44.9	38.2	40.7	98.7	43.1	43.6	31.9	58.3	21.9	0.61	16.0	46.I	59.9	51.9	86.4	77.0	9.88	72.7	113.5	81.2	81.3	84.2
1 - ‡	54.1	88.3	80.8	43.4	5.4	5.4	3.4	6-1	Ι.	9							~~	4	•	_	_	_		8.3	6.5
90				ì	n	4	6	3	34	28.	36.5	21.3	16.9	14.2	44.2	58.2	50.8	79.	75.0	87.0	67.1	132.4	80.4	7	00
38.4-49.	52.0-61.4	87.5-90.1	68.1—71.9	42.9 46.7	34.7—38.4	35.9 40.35	93.9—116.	32.9—39.4	28.3—37.1	36.6-50.0	51.8—57.8	20.2—20.8	17.0-21.4	14.5—16.2	42.6—45.5	59.8—61.9	51.2—53.42	81.8—103.	70.8—75.6	83.2—85.1	69.7—80.4	119.4-143.7	82.2—84.8	71.7—88.9	Intercristal-Bitrochant: 75.0-86.5 8

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	W-NON-W	IETRICAL	FEATU	RES OF TH	NON-METRICAL FEATURES OF THE / AUNI BUSHMEN	USHMEN		
Number	19	29	Average	Range	17	18	Average	Range
Age in years and Sex	50- : M.	50- : F.	49.5	1	55- : M.	55— : F.	54.5	1
Cranial Form	P. acutus	P. acutus			P. acutus	F. acutus.		
Cranial Type	Bo. B. (br)	B. (t)			Bo.	酉		
E	4	(Au) B.				4		
racial 1ype	Bo. Mo. B.	Bo. Mo.			Bo. A. Mo. B.	iá,		
Beard Type	Mo.	1			M.	1		
Colouration of Iris	m	77			m	6.7		
" of Conjunctiva	67	77			*	77		
Ocular Folds	Z	2 Folds			Nil	N.	p	
Colouration of Face	9	23			18	S)		
Colouration of Arm	17	%I			22	17		
Steatopygal Type	1st Type	rst Type			and Type	3rd Type		
Projection of External Genitalia	Flaccid	Butterfly Reversed			Horizontal			
Bodily Habitus	Sthenic	Sthenic to Hyposthen:			Hypoethen:	Hyposthen: Hyposthen:		
Ear Lobulation	Nil pierced	Present pierced			Z	.N.		
		IND	ICES OF	INDICES OF / AUNI BUSHMEN	USHMEN			
Cephalic Index	73.3	77.4	76.4	73.3—79.2	77.4	77.0	77.2	77.0-77.4
Auricular Ht. Index	71.3	73.5	75.2	71.3—77.6	78.5	77.5	78.0	77.5-78.5
Vertical Index	97.2	95.0	98.3	95.0—102.1	4.101	100.7		\$100.7-101.4
Fronto-biparietal Index	72.7	9.89	72.7	68.6—75.7	80.6	71.2		71.2—80.6
Facio-cephalic L. Index		54.7	55.5	53.3—59.2	55.9	4.9.2	52.6	49.2-55.9
Upper facio-cephalic L. I.	30.0	30.9	30.7	29.5—32.1	30.9	28.7	29.8	28.7-30.9
Facio-cephalic Breadth I.	91.6	86.4	8.06	86.4-95.0	98.0	90.5	94.3	90.598.0
Fronto-bizygomatic I.	79.0	79.3	80.0	78.4—83.3	75.2	78.6	76.9	75.2-78.6
Bigonio-frontal Index	87.9	9.68	89.9	87.9—92.4	5.96	89.7	93.0	89:7-96.2
Total facial Index	79.4	0.10 0.10	80.0	78.5-81.8	73-71	72.2	73.0	72.2-73.7
								B 20 + 20 - 21 - 21 - 21

Upper facial Index	44.7	46.3	44.6	42.9—46.3	40.8	41.1	41.0	40.8-41.1
u	56.5	56.6	55.8	52.8—57.8	55.3	57.0	56.2	55.3—57.0
lex	93.2	90.06	92.0	88.6-95.4	88.3	92.9	90.6	88.3—92.9
	69.5	71.2	72.0	69.5—74.6	72.4	70.6	71.5	70.6—72.4
	46.3	46.1	44.5	42.4 46.3	36.4	33.9	35.2	33.9-36.4
	36.0	36.3	36.1	32.4 40.4	31.7	28.1	29.9	28.1—31.7
	45.1	51.5	44.9	41.5-51.5	41.1	44.2	42.7	41.1—44.2
	0.811	89.5	102.4	89.5—118.0	98.8	105.2	102.0	98.8—105.2
Nasal depth-length I.	38.5	34.9	57.0	33.3-40.9	30.2	31.2	30.7	30.2—31.2
	32.6	38.9	36.3	32.6-39.1	30.6	29.6	30.1	29.6-30.6
	22.6	45.1	33.3	22.6-45.1	36.7	28.3	32.5	28.3—36.7
Ear Index	56.1	61.5	55.7	43.7—66.4	52.6	49.2	50.9	49.2—52.6
ure I.	23.6	22.8	22.4	21.2—23.6	21.0	21.9	21.5	21.0-21.9
e I.	18.7	9.61	18.2	16.1—19.6	17.5	16.7	17.1	16.7—17.5
	16.4	16.4	15.7	14.8—16.4	15.3	-16.7	16.0	15.3—16.7
I.	43.7	45.6	45.1	43.7—47.7	48.7	44.2	46.5	44.2—48.7
al)	61.4	62.4	67.9	60.562.6	62.2	61.5	6.19	61.5-62.2
•	53.3	54.1	53.6	51.4-54.7	50.8	51.9	51.4	50.8—51.9
	79.2	85.9	81.2	75.7—86.4	83.6	76.2	79.9	76.2—83.6
	72.1	73.1	73.1	70.9—76.2	71.4	72.3	6.17	71.4—72.3
_	82.0	84.2	84.2	81.0-87.6	87.2	85.6	86.4	85.6—87.2
	69.5	71.9	70.2	66.7—74.3	73.1	76.2	74.7	73.1—76.2
	9.911	118.4	116.8	110.3-124.3	115.0	97.2	106.1	97.2—115.0
(intercri:)	78.0	9.69	78.8	69.6—88.6	82.0	77.1	26.6	77.1—82.0
	74.0	82.6	81.6	74.0-92.3	73.5	87.5	80.5	73.5—87.5
	87.7	83.6	86.8	77.2—98.1	87.5	100.0	93.6	87.5—100.0

FEATURES OF THE /2AUNI BUSHMEN
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														Sthenic Hyposthen:				74.6 80.6	80.8	9.701	70.1	51.3	285	88.9	78.9	104.0	
Range																	MEN	76.5—78.8	75.1—78.2	95.4—102.2	70.7—72.4	53.8-54.4	27.8-28.0	87.1—91.4	79.1—81.1	86.9—99.1	
Average	69.5																T BUSHMEN				9.17						
91	70- : M.	P. acutus	Bo. (t)	Bo. B. ? A.	A.	9	19	Ë	25	27	ıst Type?		Flaccid	Sthenic to Hyposthen	Present	pierced	THE /2 AUNI	78.8	75.1	95.4	72.4	54.4	27.8	91.4	79.1	1.66	
15	70- : F.	P. obtusus	Bo. B.	Bo B. ? A.	1	61	2	I Fold	9	9	1st Type		European	Hyphosthen:		1	VDICES OF	76.5									
														Sthenic			TI II	76.8	74.2	9.96	71.8	51.5	32.0	86.0	83.2	1.06	
Number	Age in years and Sex	Cranial Form	Cranial Type	Facial Type	Beard Type	Colouration of Iris	" of Conjunctiva	Ocular Folds	Colouration of Face	Colouration of Arm	Steatopygal Type	Projection of External	Genitalia	Bodily Habitus		Ear Lobulation		Cephalic Index	Auricular Ht. Index	Vertical Index	Fronto-biparietal Index	Facio-cephalic length I:	Upper facio-cephalic L: I:	Facio-cephalic breadth I:	Fronto-bizygomatic I:	Bigonio-frontal Index	

43.0	51.0—52.8 55.8 52.9	ļ	82.0	39.8	ļ	50.0	95.5	30.7	32.2	28.0		20.1	19.4	16.7	45.7	61.3	53.4	9.96	74.5	85.5	82.8	7.76	79.2	
40.7	51.0 51.9 51.0	92.9	74.5	42.6	36.4	39.2	108.6	42.4	39.0	46.5 8	50.85	22.5	17.9	16.8	45.7	62.3	53.7	79.9	73.3	85.0	29.6	112.1	79.8	87.9
42.6	62.0	97.1	70.4	41.0	37.7	40.2	8,011	46.0	41.5	Deformed 66.7	\$0.8	21.3	17.6	16.6	43.6	61.3	52.6	82.5	71.1	82.8	77.8	119.4	77.6	87.00
Trans. facial Index		lex	. •		•	• •		Nasal depth-length I:				tature I :					Lev-stature I: (troch:)		a1)				intercri :)	

AVERAGE AND RANGE

Number	Male Average	Male Range	Female Average	Female Range
Cephalic Index	76.3	69.4—82.7	76.5	70.3—80.6
Auricular Ht. Index	76.9	71.3-83.8	77.6	72.2-85.1
Vertical Index	101.2	95.4114.8	101.7	90.3—116.7
Fronto-biparietal Index	73.3	69.0—80.6	71.5	65.5-75.2
Facio-cephalic length I:	53.8	51.3-59.2	51.9	47.7-54.7
Upper facio-cephalic L: I:	29.5	25.6—32.8	29.1	26.2—33.7
Facio-cephalic breadth I:	92.2	86.0-99.3	88.6	84.0-94.9
Fronto-bizygomatic I:	78.9	74.2—83.3	81.2	77.9—87.7
Bigonio-frontal Index	94.7	86.3104	89.8	71.9—100
Total facial Index	76.6	66.2—82.4	76.7	69.4-81.8
Upper facial Index	42.8	37.2—51.5	43.6	37.3-50.4
Facial length Index	55.0	47.6—62.2	56.1	52.1-62.2
Fronto-biorbital Index	89.9	84.3-95.4	90.6	84.697.1
Bigonio-bizygomatic I:	74-7	68.182.0	73.3	70.0—82.4
Interocular-biocular I:	40.7	26.1—48.2	40.8	33.9—46.7
External biorbital Index	32.8	21.3-40,4	33.5	27.9-38.4
Nasal Lbiocular Index	41.4	34.7-51.2	39.9	33.7-51.5
Nasal width-length I:	109.2	93.4—129.4	105.9	83.1—136.5
Nasal depth-length I:	37.0	21.2-47.1	34-7	20.5-46.7
Nasal depth-width I:	33.9	21.7-43.8	34-3	23.4-43.6
Mouth Index	38.2	22.6-57.3	40.4	28.3-51.3
Ear Index	55.8	36.5—66.4	59-3	49.2—78.0
Biacromio-stature index	22.I	20.1—23.8	21.1	18.9-23.0
Bitrochanteric-stature I:	17.6	15.6—19.3	18.9	16.7—21.4
Intercristal-stature I:	15.0	13.4-16.9	15.8	13.8—17.5
Arm length-stature I:	45-4	43.5—48.7	43.9	42.1—47.1
Leg-stature I: (cristal)	60.4	57.9—63.2	61.2	59.8-63.1
Leg-stature I: (troch:)	52.9	50.0—55.8	52.7	50.7-55.4
Bitrochanteric-biacrom:	79.8	73.2-96.6	89.9	76.2—103.7
Intermembral I: (cristal)	74.9	70.9—78.8	71.9	69.3-77.0
Intermembral I: (troch:)	85.5	79.1—91.2	83.4	78.2—89.2
Intercristal-biacromial	68.2	62.0—82.8	74.8	66.7-82.2
Thoracic Index	121.8	97.7-140.5	128.9	97.2—146.7
Ext. conjugate (intercri:)	81.9	75.5-90.9	81.3	69.6-90.0
Interspinous-intercristal	81.7	71.7-92.3	83.5	73.3—88.9
Intercristal-bitrochant:	85.5	77.698.1	83.5	73.2—100

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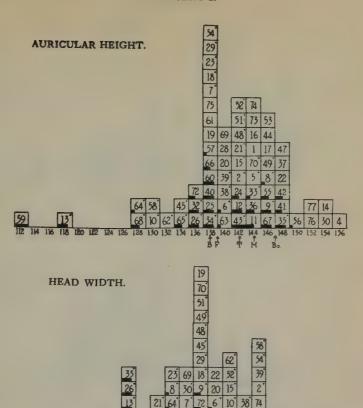
OF ADULT INDICES

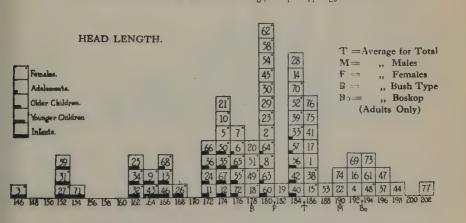
ro Indi Bush Average	ividuals Bush Range	10 In Boskop Average	ndividuals Boskop Range	Total Average	Total Range
76.9	72.9—80.5	76.7	74.4-79.2	74-4	69.4—82.7
77.8	73.5—82.3	76.6	73.9—82.3	77-3	71.3—85.1
101.2	92.9—107.4	100.6	95.4—114.8	101.4	90.3-116.7
71.3	67.4—75.0	73.1	69.0—80.6	72.4	65.5—80.6
51.5	47.7-54.7	54.2	51.3-56.8	52.8	47.7-59.2
30.1	27.6—33.7	29.8	26.6—32.1	29.3	25.6-33.7
87.2	84.0—92.6	91.1	86.0—98.0	90.4	84.0-99.3
82.3	78.6—87.7	79.4	75.2—83.3	78.3	74.2-87.7
89.1	71.999.0	95.6	87.9-102.8	92.2	71.9-104
76.9	69.4-81.8	77-5	72.4—82.4	76.6	66.2-82.4
45.0	39.7—50.4	44.1	38.4—51.5	43-4	37.2-51.5
58.4	53.2-62.2	55.2	52.0—62.0	55.6	47.6—62.2
90.8	84.7—95.2	90.3	87.6—95.4	90.5	84.3—97.1
74.2	70.0—82.4	75.6	68.1—8o.8	73.9	68.1—82.4
39.9	33.9-46.1	41.1	35.2—48.2	40.1	26.1—48.2
32.3	27.9—36.3	32.8	29.1—35.4	31.4	21.3-40.4
41.5	33.7-51.5	42.3	35.3-51.2	40.7	33.7-51.5
97.8	83.1—113.9	105.4	93.4-125.4	107.6	83.1-136.5
30.7	20.5-43.4	34-4	21.2-42.1	36.1	20.5—47.1
31.2	23.4—37.8	32.6	21.7-40.5	33.6	21.7-43.8
39.1	28.3—50.0	40.6	26.2-57.3	39-3	22.6-57.3
62.6	49.2-78.0	53.7	36.564.9	57.6	36.5—78.0
20.7	18.9-22.8	21.7	20.6-23.7	21.6	18.9—23.8
18.5	16.7—20.6	17.5	16.9—18.3	19.9	15.6-21.4
15.7	13.8—16.7	15.1	14.2—16.9	15.4	13.4-17.5
43.8	43.147.1	45.6	43.5—48.7	44-7	42.1-48.7
61.4	59.863.1	60.4	58.263.2	60.8	57.9—63.2
52.8	51.7-54.1	52.7	50.8—55.8	52.8	50.0-55.8
89.7	76.2—103.7	86.7	77.2—86.4	85.0	73.2-103.7
71.5	69.3-76.4	74.8	71.2—78.8	73.4	69.3-78.8
83.0	80.3—89.2	85.8	79.1-90.3	84.4	78.2—91.2
76.0	71.9-82.2	69.6	62.5—74.3	71.6	62.0—82.8
126.8	97.2—143.7	123.9	104.7-140.5	125.4	97.2—146.7
80.1	69.6-85.4	81.3	75.5-84.8	81.5	69.6—90.9
83.7	75.6—88.9	82.8	71.7-92.3	82.6	71.7-92.3
85.4	73.2—100	86.5	77.6—98.1	84.5	73.2-100

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HISTOGRAM I.



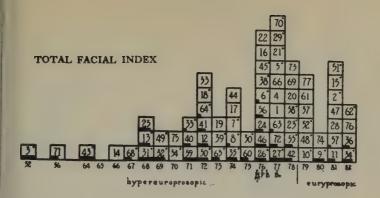


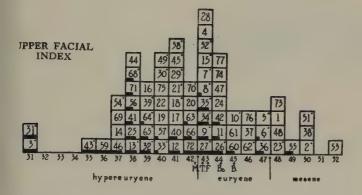
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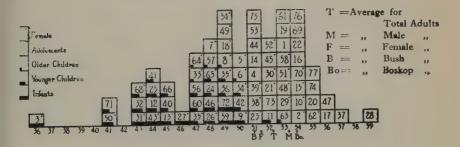
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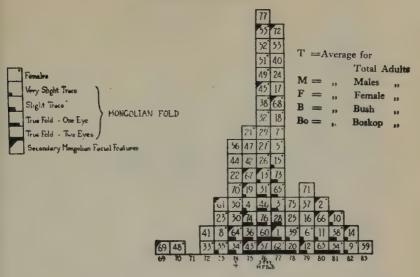


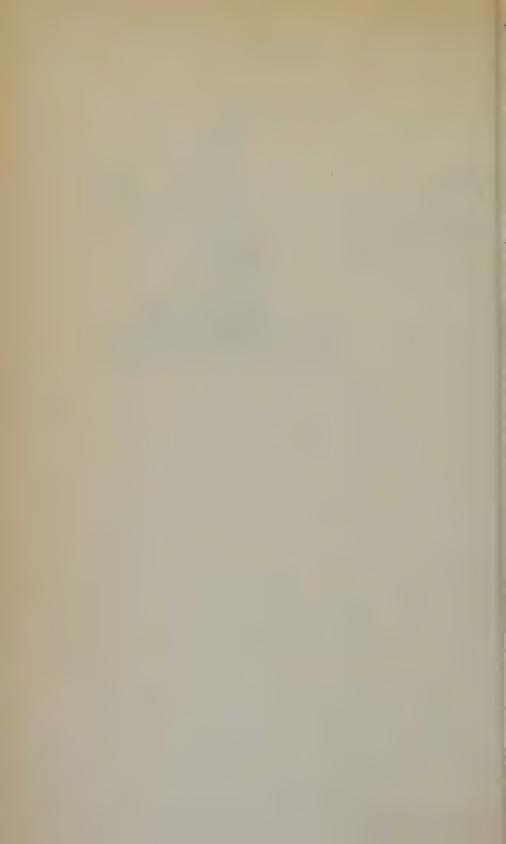
FACIO-CEPHALIC LENGTH INDEX

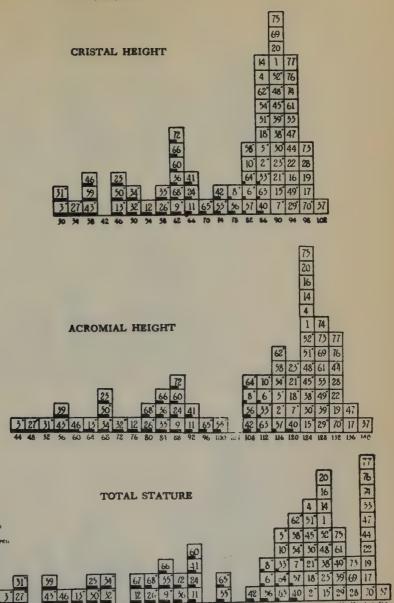


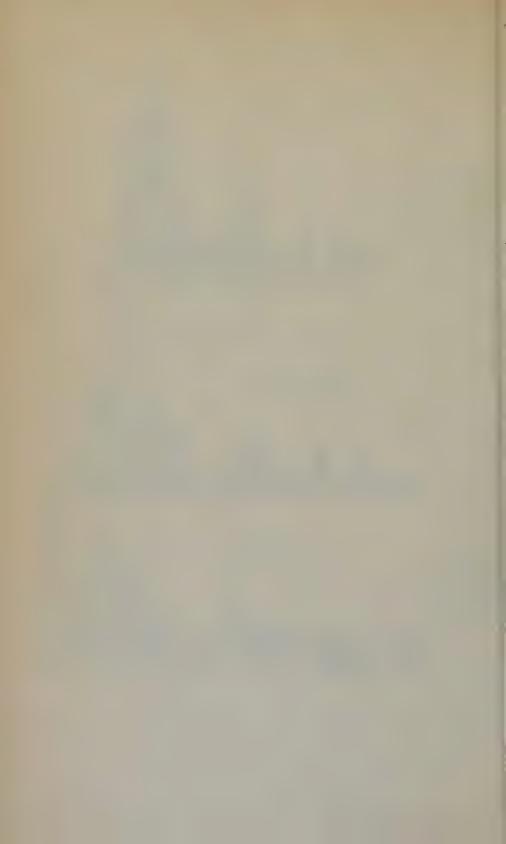


CEPHALIC INDEX

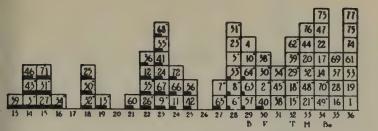




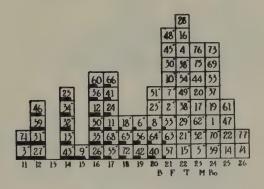




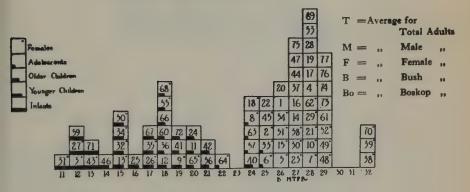
BIACROMIAL DIAMETER

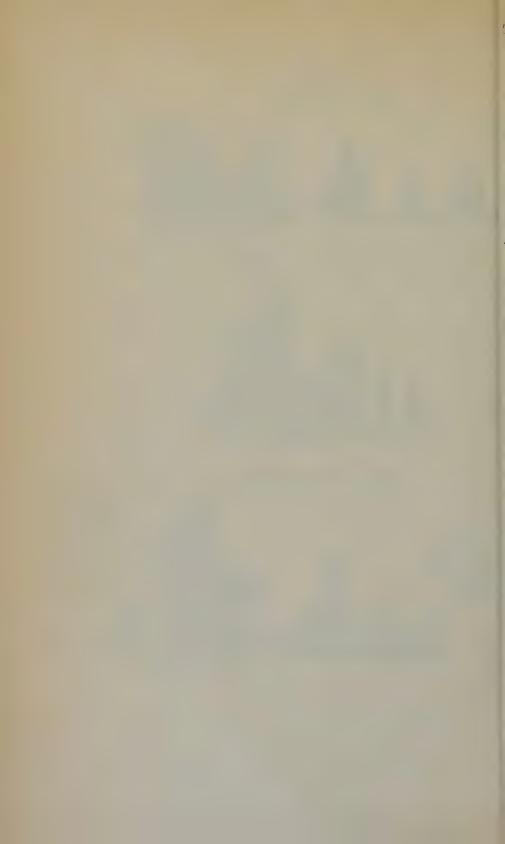


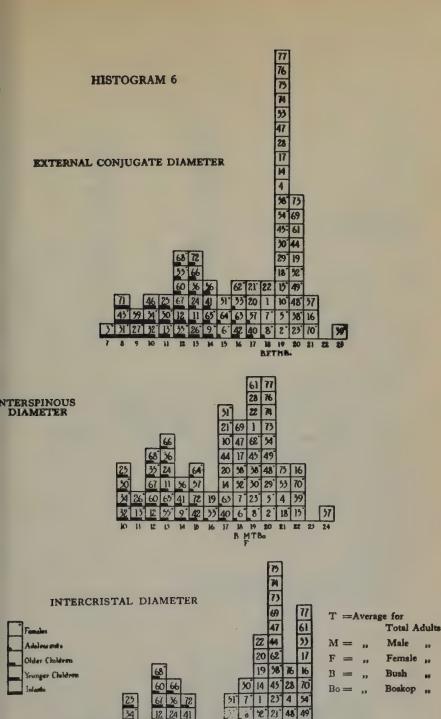
TRANSVERSE THORACIC DIAMETER



BITROCHANTERIC DIAMETER

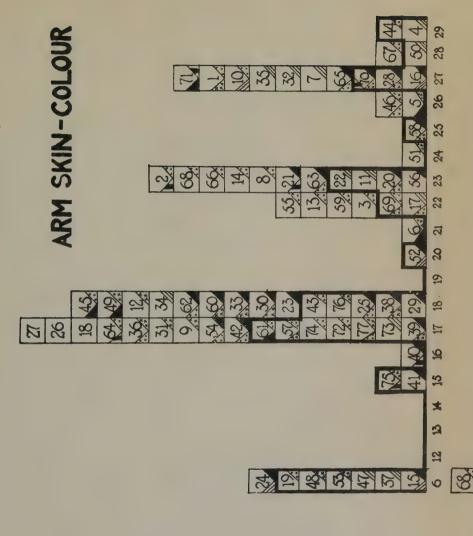




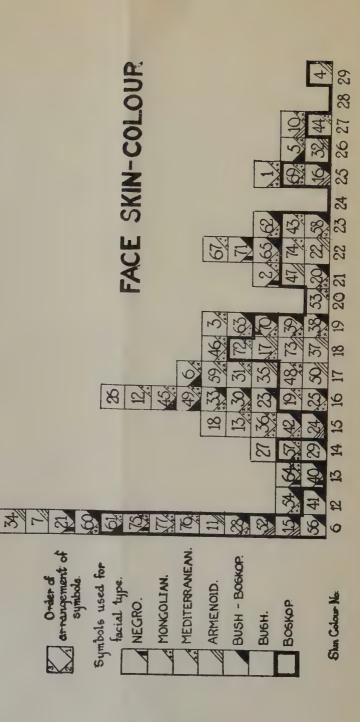


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GRAPH TO ILLUSTRATE DISTRIBUTION OF SKIN COLORATION AS COMPARED WITH FACIAL CHARACTERISTICS.



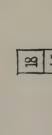
GRAPH TO ILLUSTRATE DISTRIBUTION OF EYE COLORATION AS COMPARED WITH FACIAL CHARACTERISTICS

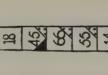
COLOUR OF

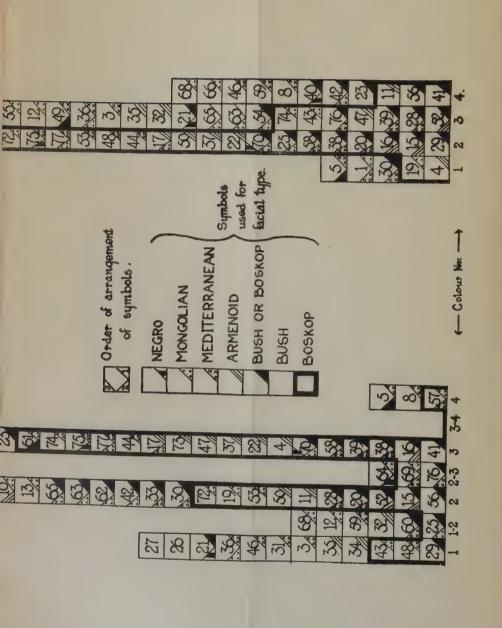
IRIS

CONJUNCTIVA

COLOUR OF







	BOSKOP		
Pentag. acutus	Pentag. obtusus	Ovoid	Total
No. 4. ♂ abraham (t) 12. ♂ tsaman 16. ♂ ≠ubeiku II 76. ♂ maarman 42. ♂ kaap (T) 43. ♀ ai ai (T)	37. & !kuribe (br) 56. & !nansi 74. & saap (t) 77. & ari II (br)	73. 3 unũũ (br)	
6 (or 54.54%)	4 (or 36.36%)	1 (or 9.9%)	11 (or 100%)

	BOSKOP BUSH	
17. 3 kabbe II 24. 3 klein ourooi 36. 3 khaku III	No. 1. & malxas (t) 14. & *!heixa (t) 35. ♀!ka!kanu 44. & alo@puā II 52. ♀ kobe (T) 53. & lukas (T)	
13 (or 68.4%)	6 (or 31.58%)	 19 (or 100%)

10 (or 33.3%)

1 (or 33.3%)

30

*Brachycephals or near Brachycephals.

19 (or 63.3%)

spection.

-		BUSH		
-	Pentag. acutus	Pentag. obtusus	Ovoid	Total
	5. ♀ khanako 7. ♀ marta 13. ♀ ²amme 18. ♀ am≠ari 25. ♂ hokusa 26. ♀ kx²oukoi (M) 27. ♀ klein suxuu 28. ♂ khaku 29. ♀ haki 31. ♀ y!ka 32. ♀ !kweye 34. ♀ mamakas 62. ♀ abes (t) 64. ♀ khoitamas 65. ♀ tsukoros II 68. ♀ ubukes 71. ♂ madekap	3. ♀ koro 6. ♀ klein khanako (br) 9. ♀ *kuskai (br) 10. ♀ *thobaku (br) 15 ♀ !kai ko (br) 20. ♂ !kwei kan (t+m) 23. ♀ ≠gauke 45. ♀ !kxube (near ovoid) 49. ♀ kãwi II 51. ♀ keri keri (br) 55. ♀ lys (t)	8. ♀ lena	
	18 (or 62.1%)	10 (or 34.45%)	1 (or 3.45%)	29 (or 100%)
	19. 3 witteman (T+M) 30. φ ou tsamas 33. φ /ues (T) 38. φ /kx un/i (t) 41. 3/gom/korop(T+M) 54. φ *suxuu VI (t)	21. ♀ mamas 22. ♂ /am /na		
-	11 (or 61.1%)	7 (or 38.8%)	-	18 (or 100%)
	TOTAL WITH	BUSH FEATURES PRED	OMINATING	3

17 (or 36.17%)

1 (or 2.13%)

47

29 (or 61.7%)

			BOSKOP					BO	SKOP-BUS	Н		
Secondary	P	rima	ry Facial T	'ype			P	rima	ry Facial T	ype		
Facial Type	Boskop		Bush		Total	Во	oskop)	Bush		Total	
воѕкор		0	No. 3 42	1	1			0	No. 3 60 No. 3 63 No. 2 33 No. 3 40	4	4	Man a company
BUSH	No. 3 16 No. 3 56	2		0	2	No. 9 No. 9	38	3		0	3	No. No. No.
MEDITERRANEAN	No. & 44 No. & 53 No. & 76 No. & 77	4		0	4	No. 9		2	No. ♀ 6 No. ♀ 9	2	4	No.
ARMENOID	No. & 4 No. & 17 No. & 47 No. & 73 No. & 37	5		0	5	No. 3 No. ♀ No. 3	50	3	No. ♀ 35	1	4	
MONGOL	No. ♀ 43 No. ♂ 74	2	No. & 1 No. & 12 No. & 67	3	5	No. 3 No. 3		2	No. & 14	1	3	No. No.
NEGRO		0		0	0			0		0	0	
TOTALS Boskop Bush	12 & 1 Q	13 0	4 3	4	13	634	Ι Ω	10	4349	8	10 8	3 8
GRAND TOTALS:	1	6 8	1 ♀		17 22.1%		1	.0 đ	8 ♀		18 23.4%	

TABLE 2. CORRELATION OF CEP

	_											
E	BUS	SH-BOSKO	P				BUSH					
Prin	mar	ry Facial T	ype		Pi	rimar	y Facial 7	уре		Boskop	Bush	Grand
p		Bush		Total	Boskop		Bush		Total	Totals	Totals	Totals
	0	No. \$ 24 No. \$ 30 No. \$ 54	3	3		0	No. ♀ 23 No. ♀ 62 No. ♀ 65	3	3	0	11	11 14.3%
5 2 8 0	4	No. ♀ 21 No. ♀ 26	2	6	No. 3 20 No. 3 28 No. 2 29	3	No. ♀ 18 No. ♀ 27	2	5	12	4	16 20.8%
9	1	No. ♀ 5 No. ♀ 8 No. ♂ 36 No. ♂ 46 No. ♀ 49 No. ♂ 59	6	7		0	No. ♀ 3 No. ♀ 31 No. ♀ 51	3	3	7	. 11	18 23.4%
The second secon	0	No. ♀ 32 No. ♀ 34	2	2		0	No. ♀ 7	1	1	8	4	12 15.6%
2	2	No. ♀ 2 No. ♀ 55 No. ♂ 66 No. ♀ 68	4	6	No. 3 19	1	No. ♀ 10 No. ♀ 13 No. ♀ 45 No. ♀ 64	4	5	7	12	19 24.7%
	0		0	0		0	No. & 71	1	1	0	1	1 1.2%
	7	5 ♂ 12 ♀	17	7	3 & 1 ♀	4	1 & 13 9	14	4 14	24 & 10 Q 34	14 & 29 Q 43	
8 6	3	16 ♀		24 31.1%	A	8	14 ♀		18 23.4%			77 100.0%

ALIC TYPES WITH FACIAL TYPES.

FINGER MUTILATION IN THE BUSHMAN'

By M. R. DRENNAN

The practice of amputating one or other of the fingers has long been known to be a Bushman custom. Finger mutilation is also common amongst the Bantu, but only within the limits of the Zulu-Xosa group (Thompson, 1925), the various tribes of which are generally supposed to have taken over the practice from the Bushman. This operation is of very great interest, as it is an example of the survival of one of the pre-historic cults of the Aurignacians of Southern Europe, the evidence for which comes from hand-prints on the cavern walls at Gargas in the South of France that clearly delineate the loss of certain of the finger phalanges.

A recent visit to Cape Town of a group of 55 Bushmen, including men, women and children, gave me an opportunity of studying the incidence of this mutilation in a modern Bushman tribe. According to Miss Bleek, who has made a linguistic study of these people, they belong to three distinct groups, namely the \neq khomani, the | auni, and the | namani.

I was able to find only six examples of finger mutilation in this group. These were encountered in four adult men and in two adult women. All six cases were decidedly elderly, and there was no example of the practice in any of the young adults nor in any of the children. It is quite obvious then that, so far as these people are concerned, the cult has now quite died out.

On enquiring as to the motive for the operation I was informed by all those who showed the mutilation that the operation had been performed in early infancy, and that their hands had been in their present condition as long as they could remember. |ganaku, the leader and interpreter of the group, who herself bears the mutilation, stated that the operation was only performed on very young children and then only when the child was suffering from some serious illness. She was quite definite that the operation was part of a therapeutic ritual, and was in no way a tribal mark.

¹ Paper read before the S. A. Association for the Advancement of Science, Windhoek, July 5, 1937.

An X-Ray photograph of |ganaku's left hand shows a complete loss of the terminal phalanx and of part of the head of the second phalanx of the ring finger. In three other cases the amputation had gone through one or other of the phalanges rather than through the joint cavity.

It seems to be the general opinion that it is the intention of the operator to amputate through the joint and that this is usually achieved. Thus Thompson (1925) states that in the Bantu "Never more than the terminal joint is amputated, and only one finger is operated upon. Where two joints are found to be removed on the small finger, this is to be explained by the fact that it is extremely difficult to determine the last joint of this finger in the infant." The evidence from these cases points to the operation having been done by placing a sharp instrument somewhat arbitrarily on the finger and then striking it a heavy blow, or it may have been done by a direct blow with a chopper. Only thus can we explain the frequency with which the operation cuts across the bone, for an ordinary cutting technique would pass through a joint in all cases. The amount removed would seem thus also to depend to a very great extent on the random nature of the blow.

In the following table I have set out the situation and extent of the operation performed on these six cases:

Sex.	Age.	Site.	Extent of operation.
Male.	about 60.	Right little finger.	2 complete phalanges removed.
Male. Male.	about 50. about 40.	Right little finger. Right little finger.	13 phalanges removed. 1 phalanx removed.
Male. Female.	about 40.	Right ring finger. Left ring finger.	1 phalanges removed. 1 phalanx removed.
Female.	about 45.	Left ring finger.	whole phalanx and a fraction of the second phalanx removed.

Although the number of cases is small there is probably very great significance in the fact that all the examples of mutilation in males are on the right side and all the examples in females are on the left side. This interesting association accords with the fact that the Bushman displays that primitive type of mind which attributes sex not only to living but also to inanimate things. According to Miss Bleek the new moon is male, but the full moon is female; a tall tree is male whilst a round spreading one is female. Similarly the stronger right arm and all the organs on the right side of the body have masculine qualities, whilst the weaker left arm and the organs on the left side have feminine attributes. It is quite obvious then that the Bushman "doctor" was convinced that, if the operation was done on the right side on males

and on the left side in females, it would be the best means of introducing healing influences and of warding off evil ones from the patient.

REFERENCES.

Thompson, H.Q.F.: On the amputation of a part of one of the fingers by certain Bantu Tribes of S. Africa.
S.A.J.Sc. Vol. XXII. 1925.



A NOTE ON THE TSAMMA AND ITS USES AMONG THE BUSHMEN

By I. D. MACCRONE

The tsamma (Citrullus vulgaris) plays many parts in Bushman economy. Widely scattered over just those desert or semi-desert areas in which the Bushmen remain still relatively unmolested and free to follow their own ways of life since it is not worth anyone's while to dispute their occupation of these arid parts, the tsamma forms a staple part of their food and drink especially in lean times. It is said that a man can live for six weeks on an exclusive diet of tsamma, and cases are on record which show that both man and beast have been saved from death by its aid.

To the European, tsamma is tasteless and insipid not unlike the wild or Kaffir watermelon of which it is the progenitor. It grows in patches and is usually found on the eastern slopes of the red sand dunes of the Kalahari. The fruit ripens in mid-winter when the runners wither away leaving the melons exposed on the sandy surface so that they can readily be detected at a distance. The rind is green or yellowish green in appearance and the pulp white with black seeds. A patch of tsamma may yield several hundreds of individual melons in one season and then, so we were informed, lie dormant for a year. This fact, if it is a fact, is no doubt determined by the amount of rainfall since in a good year there will be a very bountiful supply of tsamma.

Among the Bushmen, the gathering of the *tsamma* and its preparation is the task of the women. Plate 95 shows the way in which the melons are gathered in large net bags made of strips of animal sinew and transported to camp on the backs of the women who ease the very considerable weight of their loads by means of a taut noose which is passed across the forehead.

Tsamma seeds are a special delicacy and their preparation is quite an elaborate process. Plate 96 shows the extraction in situ of the seeds from the fruit. With great skill the fruit is sliced in two by means of a long bone knife made of part of a gemsbok rib, sharpened and polished. The point of the knife is inserted to some depth and run round the rim of the severed half. The pulp is extracted by inserting the fingers while a vigorous shake sends the wet seeds flying on to the sand after which the

core is thrown aside. The speed with which the process is carried out is impressive and great numbers of tsamma are "gutted" in this way in a very short space of time. The wet piles of seeds, together with a considerable admixture of sand, are then scooped on to a skin the ends of which are gathered so as to form a compact bundle.

In the camp, handfulls of the seed are roasted by being thrown on to warm ash for a few minutes. The rather repulsive mixture of seed, sand and ash is sifted by means of a small, light sieve made of slender reeds and most of the debris is winnowed away in this fashion (see Plate 97). The larger pieces are removed by hand as illustrated in Plate 98. What remains of the roasted seeds is then ground on smooth, flat stones but this stage of the process is performed on a fairly clean, tanned skin as illustrated in Plate 99. The coarse, dry meal, whitish in appearance, which is the result is still further treated and most of the broken husks removed. This meal has a pleasant flavour not unlike that of grape nuts and contains relatively few traces of grit whether in the form of sand or otherwise. The food value of the tsamma meal is probably considerable and we were informed that the European farmers with whom the Bushmen come into contact, obtain supplies from them and use it as an alternative dict to the usual mealie meal.

In addition to serving as a food, the tsamma meal which has an oleaginous quality, is also used as a cleansing agent, especially by the women. The preparation of this Bushman "soap" is as simple as it is effective. A lump of the stuff is chewed and thoroughly moistened with saliva. The paste is then smeared over the body and vigorously rubbed into the skin. In Plate 100 we see two matrons in an improvised beauty parlour massaging themselves with their beauty preparation. The result was rather startling since, by the time they had finished, their skin had changed from a dingy brown to a rather bright and attractive copper colour. In the very dry atmosphere of the Kalahari in winter time, this treatment has about the same beneficial effect as the application of cold cream to the exposed skin surfaces of the European, (see also Plate 101).

Plate 46 illustrates yet another use of *tsamma*. Given to very young children and babes, it provides them with refreshment in both solid and liquid form and at the same time keeps them occupied and contented.

Finally, it might be added that *tsamma* skins form a readily available target that can be satisfactorily pierced by the arrows of the youngsters while in other games, such as one played with oxen, the same skins are used to represent these animals.

GRAMMATICAL NOTES AND TEXTS IN THE /AUNI LANGUAGE

By D. F. BLEEK

The recent visit of some Bushmen to the exhibition at Johannesburg enabled me to continue a study of their speech begun twenty-five years ago on a short trip up the Nossop. Thanks to the hospitality of the Witwatersrand University, which I gratefully acknowledge, I spent several weeks at the Frankenwald Research Station, where the Bushmen had their camp, and held daily talks with individuals.

There were three or four Bushman tribes represented in the camp: the $\neq khomani$, whose speech Professor Doke and Dr. Pienaar were studying, the /auni, to whom I devoted my time, the /namani, who had been living among the Nama and only spoke the Nama language, and a few women of the Khatia or Vaalpens tribe who had married /auni and /namani men. One of these spoke the real dialect of her people, and I hope Mr. R. Story will give us some information on that subject.

| lauo, as the | launi call their language, is one of the Southern Group of languages. It is somewhat like the \(\neq khomani\) language, yet is a step nearer to the Central Bushman Group, which means that it is nearer to the Hottentot tongues. Of course the fact, that the families at the Exhibition come from the mutual border of their respective countries, and have intermarried a good deal, tends to bring their speech nearer together.

All five clicks are found in |auo|, the dental and lateral ones being the most frequent, which is not the case in the |xam| Bushman. The other sounds used are much the same; t and k often turn into tj and kj. For the indefinite sound between t and t I have used Professor Doke's symbol t.

In compiling the vocabulary I have found many synonyms. Some, I think, are due to the use of $\neq khomani$ words by the descendants of mixed marriages. Others may be dialectical variations, especially where there are examples of two clicks used with the same word, as $!\tilde{u}i$ and $\neq \tilde{u}i$ ostrich egg, or of click + consonant + vowel interchanging with

consonant + vowel, or with the vowel alone, as //kai, ^-kai , ^-ai mother, or $_-//ka:a$, ^-kha water. The gradual dropping or softening of clicks is found in any Bushman language subject to alien influence. The interchange of g and k, and of k and t is found in this and many other Bushman tongues.

The grammar seems simple but is confusing, as certain syllables play so many parts. The short clickless words ga, ka, ke, ki, ko, ku, ta, te, ti, tis, sa, se, si, sis seem to have several meanings each. Nouns form the possessive case by adding -ga or -ka to their roots. Pronouns take -ga or -ka or -sn in the possessive. For example $n \cdot |go:-ga|/k\tilde{e} \cdot |oruve$ my husband's name (is) |oruve| $n-ka \neq nui$ my ear. a-sn/|an| thy hut. There is no other declension of nouns, unless a tendency to repeat the final vowel can be so designated, but it is not used regularly either in nominative or objective.

In the singular nouns often end in ri, sa, or ba, and plural nouns often end in ke, ki, te, ti, si, or n, ni. For example:

Singular	Plural	
auri	/auni	member of the tribe.
gwaba	/gweki, /gweti	child.
-/kē	-/kan	woman, female.
	/kinke	children.
	/neike	little ones.
	tuke	men.
	/koti	buttocks.
!k"arii	!k"arisi	youth.

As seen in |gwaba the vowel sometimes changes in the plural; some plurals are quite irregular.

!ke!ke	!kei !kei	finger.
ha, hasa	-//ka, -//ka //n	little child.
de, b€	tutos, tutus	man.

These are general plurals. With numerals the noun is followed by several particles, the most frequent before "two" being |na tis, |na tis, |na se, dwas; after a pronoun sis; before "three" ||ais, te k"es, ||na tis, or ti i. For example:

$//n$ te $-\neq \tilde{u}$ -u	one hut.
//n //na tis /kam	two huts.
//n //ais !nwona-a	three huts.

 $\neq i ti \neq \tilde{u}$ -u one person ≠i |na tis |kam two persons. ≠i te k"es !nwona-a three people. be te ≠ũ one man. be |na dwas |kam two men. tutosi -//kani many men. u sis |kam you two.

The personal pronouns are:

	1st person	2nd person	3rd person
		Singular	
Poss.	n, y, na, m n, n-ka, n-ga, m	a-ka, a-sn	ha, he ha-ga, ha
		Plural	
i,e (incl.), si, se (excl.) i, i-ki, i-se, si	u, du u-sn	hu, du
Inte	errogatives are:	sa kd whose?	suü where?

|ne ká e where is? -kauku where?

Verbs are conjugated by means of verbal particles preceding them. These are:

a	present or narrative.
ga, ka, ko	past or perfect.
ke	duration.
ki	present.
ku	present, future.
oa	present, probably duration.
oku	repetition.
se	future, subjunctive.
xa	present.
/ne	present, sometimes interrogative.
/no	to let, used in imperative.
/ki	after verb expresses gerund.

In talking the subject is often omitted after the first mention, the verbal particle heads the following sentences or clauses.

AUNI TEXTS

Abraham's second Marriage. Dictated by //kobe, a /auni woman

n 'khaia-ke ||amaro a ke Txəbaku. Txəbaku ka .≠goba, "n 'khaijo" n ka .≠goba "m @pwa:xe."

O Api |ku, "banje a !ku ka |na !numa, n ||en |geki, n ||en -u ha _||aruse." O Api ha !gwai ||ho, ha |kwe |ku !numa, a |xei. O Api ke |nau |kona |geki, a ||na -u |geki, ha _||arusa |na |geki, ha _||aruse ||ŋ.

Txəbaku ki k"a, ha |ki |k'ara, Txəbaku ||eja -haru, a ku sa. O Api ko, "|na," a tseki |geki. A ko ko, "hē-ē, hē-ē, hē-ē, ŋ ||ko na |nu a, n tiá ke." O Api ko, "a _|go," |eja, a ka !kau-u, ha _|go.

My mother's niece is this *Txobaku*. *Txobaku* calls (me), "my mother," I call (her) "my daughter."

Khora (1st wife) is dead, and Api is left, walks about, looks at Txobaku. "I am looking to fetch you." Txobaku says, "old Api, you are too old, I will not marry you." Old Api says, "though I am old, I will yet take you; return home, I fetch (you)." Txobaku runs back, goes home.

Old Api says (to his master), "give me much tobacco, I go to the woman, I go to bring her back." Old Api packs into the bag, he packs up tobacco, slings it on. Old Api goes to fetch the woman, seizes the woman, he returns with the woman, returns home.

Txobaku cries, she keeps struggling, Txobaku runs far, he comes. Old Api says "wait," catches by the leg the woman. She screams, "oh, oh, oh, I refuse to marry you, I wont." Old Api says, "lie down," goes in, beats her, she lies down.

A Storm, by //kobe, an /auni woman

"||kani e \(\neq k\elle': \) ki _||go. |no kweke, |no kweke, o _!kau uki n |i. khai _toa, "khai si \(\neq k\alpha\)si ki !howa,

Much is it raining in the night. Get up, get up, make me a fire. Water comes down, water is filling

¹ Abraham is called "Api" here.

"khai-i he |kã, "khai-i |ka |kã, "khai-i ke djan. i ts²use ke konse, "||kani ki ≠kẽĕ, ki séë. ki kiã-tjaba, "||kani ki kiã-tjaba, _!kau-uki |i. "kha si ≠kãsi ke _||an ≠ke.

up the vlei, water runs, water is running, water is rippling. It is blowing past, much it rains, it comes. It lightens, much it lightens, make up the fire. Water is filling up the hut floor.

Building a Hut, by //kobe

|geki ||ansi |u:sa. ||an ki us. =?e ki e, se ||an us. n ||ka:xe se ||an e kiá kause us. n ke ||ama ke n kiá us. A ko |kwána u si |kam, a ko ||ama are kiá us.

Women erect huts. The hut is big. That person's hut is big. My sister's hut is not very big. I have built one not big. Thou hast children two, thou dost build one not very big.

I have cut grass, mown grass. Thou (to man) go out, take the axe, cut bushes. Woman carries the bushes (in the kaross), man carries bushes (on his shoulder), goes home. I cut, I lay together what is cut, and tie it up, and carry it home. Stick in the sticks, we finish working sticking them in, thatch the hut. Woman thatches the hut. Nicely thou thatch the hut, that I am not wet.

Girls' Initiation, dictated by //klon/ki, an /auni woman

|a -kei, a ki -uki ||an - \neq ke. |a ||k²u ||an - \neq ke. |a ku sum, -|a_|aba ki ||an - \neq ke, sã ki ||an - \neq ke. A ha i so tiresi ||an, so tira, ti \neq ũ ha tisi ||an, ti ti sã |kẽ ||na tis |kam.

Girl is big, sits on the hut floor. Girl reposes on the hut floor. The girl gets her period, lies down on the hut floor, sits on the hut floor. There sits the big girl in the hut, sits as a big girl, stays alone in hut, sits days which are two.

|ga:`kei kı se .≠gã `nara .!wara, |ne ko sã ||an '≠ke. ≠²e ≠k''óä, !k''ari-ï, "sa ki ||an '≠ke, |nu ≠k''õï ti ||kariï |kwa." Tutu a ≠k''óä ti |kwa. .!wara |ga: kei ti -|dho. Granny comes to bring tsama to the maiden, sitting on the hut floor. People dance, youths, "come from the hut floor, let us dance to influence the child." Men dance for the child. The maiden's granny tattoos (her).

IAUNI VOCABULARY

By D. F. BLEEK

a thou, thee, thy, s. a-sn.
a (after noun) this.
a verbal particle, pres. or narr.
a part of verb to be, s. e.
_\tilde{a} to eat, s. _ha, _há\tilde{a}.
ab\tilde{u}, empty eggshell.
-ai mother, s. -kai, 'khaia, ||kai.
dke to give.
dre very, strongly.
a-sn, thy, s. a.

Ь

_ba all.
banje much (Afrikaans).
be man, male.
bere boy, son.

d

da man, person, s. de.

dãs thigh.

dama Berg Damara.

_dau in /ken-su_dau to-morrow.

& \(\sum kaika-de_dau \) yesterday.

de man, person, s. da, tuke, tutos.

des, dis connects noun & numeral s. tis, dwas.

djan to ripple, flow.

_d5\(\tilde{o} \), _dosara tin (German Dose).

doro-\(\sum nanta \) tinderbox.

du, dudu, you, they, s. u.

_du\(\tilde{a} \) to lay together, collect, pick up.

dwas connects noun & numeral, s. des, tis.

K

e to be, s. a. e and.

e occasional form of i we. \tilde{e} - \tilde{e} no.

g

ga possessive particle variant of ka.
ga verbal particle, past, variant of ka.
ge with, from.
ge where is? (after noun).
geä, geë yes, s. gjeja.
geite heavy.
gese also.
gjeja yes, s. geä.
goä metal, knife.
gudo boys.
gudom cucumber.
gumi ox, gumis /kẽ cow.

h

ha he, she, it, that, those, there, s. he, hi.
ha, hdä to eat, s. ā.
hdä, here, there, thee.
hää, häë to stay.
haija, haije to speak, s. ije.
haijo hullo.
haka four (Nama).
haru far.
he he, she, it, s. ha.
heri !nu:ba has died.
hi that, s. ha.
ho: to get, catch.
hu they, s. u, du.

1

i verbal particle, imperative.
i part of verb to be, s. a, e.
i ending of verb, showing habitual action.
ije to speak (after negative), s. ¬haije.
i:, ¬i: ti to go away.

J

ja contraction of i a we & verbal particle.

×

ka verbal particle, past or perfect, s. ga. ka possessive particle after noun or pronoun, s. ga. -kd will. *kai to grow, to swell, s. *kei. *kai, mother, s. *ai, 'khaia, //kai. kasi box (Dutch kist). _kauki, _kauku where is? kause very. ke possessive particle, s. ka. ke verbal particle, duration. ke in, to, of, for, s. ki. ké, kéë it is, that is. *kei big, s. *kai. "keira old, s. "kira, xaia. kenke, kenkie they are. -kha:, -khaä, -khai water, s. _//kha:a. 'khaia mother, vocative 'khiajo, s. -ai, -kai, //kai. khatia a neighbouring Bushman tribe. ki here, that. ki to, on, at, in, by, s. ke. ki verbal particle, present. kia are these, is this. kiá not s. tá, tiá. kiãn to walk about, s. tãi. kiãn to feel, s. tiãn. kiã_tjaba to lighten. kië to, with, near. ki-i is that. ki-ke is this, are these. "kira old, s. "keira. kiü too. ko verbal particle, past, perfect. ko: ostrich, s. tóï. ko says, cries. ko-ko will, may. kóko bird, (beak worn by Abraham). konse past, across. koroë wagon, s. kuni. ko-uko among.

ku verka particle, present, future.

*ku to run.
ku and, joining verbs.
kuni, kunihi, wagon, s. koroë.
kun-lu round grinding stone.
kuru to work, make.
kututos the people, s. tutus.
kwa while, as.
*kwa:-a to speak badly.
kwe to.
kweke up, to arise.
kwikie, to go to, to approach.
kxãũ to sit, squat (by the fire).
kxo, kxu to bring, fetch, s. *k"u.

k**

k"a: to cry.

k"āā to drink, s. k"ē.

k"amsa fastened to the head (a mode of carrying).

k"ane to sprout, swell, s. -kai.

k"auö at twilight.

k"aul ko to go to visit.

k"ē to drink, s. k"āā.

k"eē to go in, fall in.

k"eē to cut up.

k"eisi donga.

k"es particle used with numerals.

k"o bowstring, s. //k"o.

k"o to rub, anoint.

-k"u to take, to marry, s. kxu.

m

m my (before labials).

-ma plural ending.

mana they, s. masa.

mánaä, mánase pipe (wood or clay).

masa they, s. mana.

n

n for, in, with, into.
n, y I, my, me, s. n-ga, n-si.

na I.

na in, to.

_nara, _naro tsama melon, s. niara.

ne I, s. n, n, na.

n-ga my, s. n, n.

niara to make pap of tsama, s. _nara.

no then, just.

n-si, n-sn my, s. n, na.

n_lo: axe.

0

o old (Afrikaans ou).
o to, in order to.
oa verbal particle, present.
oku verbal particle, repetative.
pere bread (Dutch brod).

8

sd to come, s. "se, "si. sã to sit down, put down, set, stay, s. são, sõ, sda to bring from, come from. sã: a fat. adi. sabe arrowhead. sa-ká whose? sako to bring. sanja a certain snake. são to sit, s. sã, sõ. sãu to scrape, to work (a skin). se we, us (exclusive,) s. si, tsi. "se to come, s. sá, "si. se verbal particle, future, subjunctive. se to be, s. si. séā come in, come to. seri to rub. si to be, s. se. "si to come, s. sá, "se. -si possessive ending. si we, our (exclusive), s. se, tsi. "sigü: Agama lizard. "sija came, s. "si. si/ku bird.

si!ã, sin!ã kaross.

si -//hansa apron.

-sn possessive ending.

snsn to work.

sõ, so to sit down, s. sã, são.

som shade.

so/ã a certain vegetable medicine.

su after.

su:ka boy.

suke here.

sukéë down.

sum, menstruation.

susu-u to be staying sitting.

su-u where?

swike to ache, to hurt.

ta it acc. tá not, s. kiá, tiá. tdäsi not to have, to lack, be lacking. taba, tjaba to lighten. tãi, tai, tdãi, to walk, to go. tãi tãi to walk along. tan that is, those are. táne, táni to carry (in hand or on head), to bring, s. tári, tjáne. tantan to cut, to pare, tão to give. táre, tári to carry, to bring, s. táne, tjáne. tata father. te, ten, tes particle used before numerals & adjectives. te e it is, it was, this is, these are, s. ti e. tt to make, to do. ti particle used before numerals, s. tes, tis. ti to, on, at, from, down, round. ti e that is, there, s. te e tiá not, will not, s. tá, kiá. tiãn to feel, s. kiãŋ. ti:ra, a big girl, a grown-up. tis particle used before numerals. tisi in, inside. tjane to carry, s. táne, táre.

toā to finish, be finished. toa down, to lie down, come down, tõã-a to lay down, to bury. tói, tóis ostrich, (possibly $\neq khomani$), s. ko: tovesi to get fat. "ts?a to shoot, to hit ts?ai-i shot, s. txu. tsami whip. $tsan \neq k$ ''daita cheeks. tsari small kaross. ts?a:xu, ts?a:xuke eyes, s. tsóö. tseki to catch by the leg. tsi we, s. si. tsi to speak. ts?i: to ache. tsi tsõ mouse. tsóä red colour, ochre. tsóö eye, eyes, s. ts?a:xu. _ts?50 to dance. tsori ant. ts?ou pips, seeds. ts?u to stamp, grind with stones. ts?u:, ts?u:se to blow (wind). tu, thu mouth (may be $\neq khomani$) s. $\neq ku$: tu: to hear, to understand, s. tu:i. tu:ho to listen. tu:i to hear, s. tu:. tũa to lie curled up. tuke, tuku men, boys, people. tutuse tutusi men, boys, people. twa to tie up, s. _dwa. twas, a form of dwas. txo brother-in-law, husband's brother. txu (voiceless) to shoot, s. -ts?a.

N

"u up, to lift up, away, to go away, take away.

u you pl. they, s. du.

uki to sit on.

u:ku to marry, s. "k"u.

txu-u juicy.

"uku to set (sun).
"us, "u:si, "u:∫i big, old, tall.
"uwa= "u a take thee.

×

xa, verbal particle, present.
xaiā, xaixa old, old man (possibly #khomani) s. *keira.
xāū to hang up.
xein, xeinse swollen, sore.
xu up, away.
xxiū head, s. /na:.
_we, xwoi good, well.

2

ze to fly.

/a girl. "/a, "/aho to cut, to tattoo. /a to set (sun). -/ã dead. /d, /ds in, s. /e. /ama to pass. /ari tongue. /asi to put in, s. /d. -/asi big, long, tall, s. -/isi, -u:si. /au to slice, s: -/a, -/aho. /au, /auo language of the tribe. launi name of tribe, pl. |auri name of tribe sing. -/auo, -/au dead, s. $-/\tilde{a}$. -\a_\aba, -\e_\aba, \text{ to lie down, go into retirement.} /e in into, down, to go down, to enter, /e kie -/a enter into death, die. $|e:,|\epsilon:$ heart. /ee to collect, put in (to a bag). /e/era to complain, whine. /e/ani to look at. leinki to make a cut. /e//kai mother's sister. $-|g\tilde{a}|$, -|gan| to hold, to dig up.

|gaba a little bag. _/ga:ke old woman. _/ga:"kei granny. /gau air. /ga:xe niece. /ge: father, s. /ke:. /gein when. /ge:ki wife, woman. /go: bird. _/go to lie down. _/gova back dress (of girl). _/gwa to shoot. /gwaba child, pl. /gweki, /gweti. /gwi to open (flower). /gwisi to come up (clouds). /ha, /ha husband or wife. /hãä married. /háã bow, s. /han. /hő white man. /hõko in /kẽ ka /hõko to have a cold. /hoti buttocks. "/hu:i down. /hubu tired. Ihumsa cloud. /han bow (for shooting) s. /hda. /hn, /ho to pick up. "/huru to play, to throw sticks. /hu-u Kafir fink. li fire. */isi bigger, s. "u: si, "/asi. */ka: to burn, light a fire, roast. /ka to become, to be. /kã grass for thatching. ./kã to travel, to fetch, to run. /káä certain berries, the berry tree. /ka:ba cap. /kabo to thatch. /kãi, /kãijo cousin, relative. /kakaso to cut hair, to shave. /kaku to carry (child on back).

/kam two (Nama). /kanasi yirl, maiden. /kara fine. /kauwa to hold. /ke to have, to take, /ke u to pick up, s. /ki. /ke: father, s. /ge:, /ke/ke. "/ $k\tilde{\epsilon}$: woman, female, pl. /kan. $-/k\tilde{\epsilon}$, $/k\epsilon n$ sun, day. -/ke, blue wildebeest. /ke, /ken name. /keka ke why? /ken su _dau day after to-morrow. lken té e to-day. /ke:so grandfather's brother or sister. /ke:xo father's sister. ike/ke grandfather. /ke/kui to sift. /kha face, sole (of foot). "/kha, "/khe-i to cut, to pare. /kha:si a certain tree. /khóö hair. /ki, /ki to have, to hold to get, to make, after verb expresses gerund. /ki: paauw. /kibi boy, s. /kabá. /kinke children. /ko: honey, bee. _/koä reed, arrow. /kobá boy, s. /kibi. /kõï locust. /koko bring wood, make fire. /komaku hand, fist. /kõõ to dance. /kore tribal mark on forehead, s. /kuri. -/kota apron. /ko-u leglet. /ku says. /ku: to pack up. /kuën ka to lie upon, /kan to see. _/kan to beat, be beaten. /kusi to look at. /kuri cut on forehead, s. /kore.

/kwā to wet.
/kwa: to go out.

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_/kwa child, _/kwana children.
|kwe |ku: to pack up.
/kwi to reach, arrive at.
_/kxam quickly.
/k"a, /k"an hand, arm, foreleg, wing. /k"a /na hand.
/k"ã to plait (a mat sieve).
/k"aä to clean, pick over.
/k"abe leopard.
//k"ai lion, s. //kwe:ke.
k"aia to tell.
/k"ara to struggle.
/k"are rattles for dancing.
/k"áü strap, riem,
/k"au-u waterpit.
/k"e to be thirsty.
/k"einsi, /k"esi beads.
/na: head (probably \neq khomani) s. "xu".
_/na: to see, s. _/ne.
/na give, part of /no to give, to let, /naä will give.
/na k"o dia marry him, /na u:ku marry her.
/na to wait.
/na..../na..although.....yet....
/nabo sandals.
/nai well, adv.
/nam mat sieve, s //khau.
/namani a neighbouring tribe, sing. /namasa.
/nami to throw.
| nas, | na se, | na tis, | na dwas particles joining noun to numeral.
[na:si a big root, tuber.
/nau to sweep.
/ne verbal particle, sometimes interrogative=do.
_/ne part of _/na: to see.
/neike the little ones.
/nérasi baboons.
|ne |nori to take away.
/no, /no to give, to let, to allow, s. /na.
/no nose, /noituke nostrils.
/nu:a afar.
/numa palm (of hand).
/nwasko working (?)
/nwe ke #gavi to spread out (a skin).
/neri big kaross.
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/ô porcupine.

/ohé to sling on.

/ori ant.

/ũ only, s. ≠ũ.

-/u gone over (rain), s. /e.

/u:, /u:sa Kafir, Chuana.

/ũi to smear on.

/uri a pipe.

-/u:sa to erect (a hut).

/usi elder, to bring up, s. /ãsi, -u:si.

/úwa not to know.

/xá:a gemsbok.

/xēja to wear.

/xu: thorn.

_/xwa: to dance.

!a to be left behind, left standing. -!ã up, to stand. !a-a hedgehog. !dbu gun. $!\tilde{a}\tilde{\imath} \neq k\epsilon$: the Nossop. _lau next, younger. !ãũ dust. le lower leg. !éja to beckon. !ga: hartebeest. !gd:ä ground. !gai to shut (hand). !gau to sling on. !gau tõä the Auhoup. !ge so to sit down. !ge:xa sorceror, doctor. !gi: a kind of hyena. !go tobacco bag. !go: man, husband. !go pot. !gom to bury. !guma a musical bow. .!guru to thunder." !gwa to pull, draw (the bowstring).

AUNI VOCABULARY

!gwa-i to pack into.

!gwara child, baby, s. _!wara.

!ha: star.

!hana ashes.

Ihówa vlei, pan.

!kã eland.

!ka-te-ku to run away.

!kaira to be lazy.

_!karo tassel of beads.

!kau to fetch.

!kaū to sit, to squat.

!kau to hit, to beat, !kau u to knock down, !kau kwe to knock over.

!kãũ bracelet.

!kau:ke tattoo marks, sing. !kau:si.

_!kauki, _!kausii to rub fire.

!kãũnu earring.

_!kau-uki to make up a fire.

!kauwa to cut wood for fire.

!ka !gai puffadder.

!ke!ke finger, pl. !kei!kei.

!khã girdle, beads.

!khi a tree, "witgatboom."

!ko: door.

!ko to set down.

!ko strap round leg, garter.

!kõ uncle.

.!kóä to stamp.

!koeke to clap.

!kõi moon.

!kora, !korasi certain grass.

!kora to clean.

!koru quiver.

_!ko _!gwa to dance.

-kan path.

!kuse, !ku-u to run, to come.

!kwara to carry in the kaross.

!kwoi words.

!kwoi!kwõi-e to look about for.

!k"ai foot.

!k"arii, pl., !k"arisi boy, youth,

!n here.

!na: red cat,

Inara porridge of camelthorn seeds. Inare hail. !no: stick, kirrie. !nobo twirl, to rub fire. !noma feather. !nu:ba in. heri !nu:ba died. _!numa tobacco. !nwa"!wa koraan. Inwe strap. !nevi:sa a pipe stick. !nwona, !nwona-a three (Nama). !ohé plate. !uhi: to jump. _!ūi ostrich egg. Iwara girl, maiden, s- !gwara. !we sickly. !weko to carry on the shoulder. !xaika to-morrow, Goodbye. !xau light a fire, !xauwa make up a fire. !xoka to pull. /xom off.

H

```
//^2a to dig.
//a to go s. //e, //ale tai.
//a: to fight.
_//?a silver jackal, s. //has.
\frac{1}{2}a breastbone.
_//aa: large cucumber.
//abo shoe, s. /nabo.
//?ai belly.
//aiko to pour in.
//ale tai to go away, s. //a.
//ama to buy, to barter.
//a:ma to build.
_//ano to bring back.
_//anu, _//aru to return, go home.
//ara stick for throwing.
_//aru s. _//anu.
_//au, _//ausi, flower, springtime.
//e to go to, to put into, s. //a.
```

```
//eja went to.
//en to go to.
a//gue shoulder.
//gãi hyena.
1/gau, 1/go night.
//go: tortoise.
_//gó5 grass.
//goha to bake, to roast.
//gum to pick.
//guwa to d'p up.
.//gwa spoon.
//gwara to take off.
//gweke to put in, to dip in.
.//gwi to scoop up.
//ha, //hai, //hasa child, baby, girl pl. "//ka, "//ka_//n.
//has silver jackal s. _//?a.
//ho bag.
//ho to throw, to pour out.
//ija gone, s. //eja.
.//ka: to cook.
//ka, //kaä to go, move.
//kã nice, fat.
"//ka, "//ka_//n children, pl. of //ka.
//kai mother s. "ai, 'khaia, /e//kai. //kai te "u.si grandmother.
//kãi mierkat, one kind.
//ka:kia to roast.
//kdkove chryslides of ants.
//kale, //kare sky.
//kama aardvark.
//kam, //kami to cut, to mow.
"//kani, "//kari much, many, ali.
//kari to work, to influence.
//karisi high.
_//karu bag with fringe.
//kas, //ka:si brother, s. -//ka.
//ka:si uncle, father's brother.
//kata to put on.
"//kau smoke.
//kãũ to fill.
//kauwa to carry.
//ka:xe sister, aunt.
"//ka"//n children, s. "//ka.
```

```
//k\epsilon to start, to move.
//kei horns.
//keinsi both, a pair.
//keisi female breast.
//keisis clothes.
//keku to lift, to sling on.
//kéle mierkat, one kind.
_//kha:a water, rain, s. _kha:.
_//khaku to dip up.
_//khátia Kalahari.
//khau mat sieve, s. /nam.
//kh?oon to descend (sun).
//khúisi the Malopo.
//kl3 to dance.
_//ko to refuse.
//ko: bark of tree.
//kõ, //kõi to take
_//kóä arrow, s. _/koä.
//kobo to bring back.
//koë a melon, tsama.
_//kom anteater.
//kõnuke lungs.
//kos to be wet.
//kora to draw, to scratch.
//korasa fingernail.
//kóü leopard.
/ko-//a summer.
-//ku neck.
_//ku to run away.
//kube to pack, s. //kum.
//kum, //kam springbok.
_//kum to pick up, to put into.
_//kuru path.
//ku:s bird.
//kwa particle used before numerals.
//kwa to hunt.
_//kwa: to run, to go, s. _//ku.
-//kwa to speak or understand a language.
//kwá, //kwáä, //kwáke to put in.
//kwaä tough.
//kwai seeds.
//kwãisi short.
```

```
//kwe to fetch.
//kwe to cough.
//kwe:ke lion, s. //k"ai.
_//kwẽ_//kwẽ knee.
//kwi to pick up, take, get.
//kxeki to know.
//k"aa autumn.
//k"á-ã camelthorn.
//k"ai a story.
//k"am quickly.
//k"ane to cut off.
//k"anku to wind.
//k"ari the wind, a certain one.
//k"abu tsama food.
//k"au back, s. //k"we:.
//k"auü to strike (lightning).
//k"e spoor.
//k"ei flat grinding stone.
"//k"eisa a burnt mark.
//k"ansi full.
//k"aru backdress (man's).
//k"o: a musical instrument, s. //k"u.
//k"oku to set (sun).
//k"om dry.
//k"ooki to pour in.
//k"õõ to dress a skin.
//k"u sinew, bowstring.
//k"u: to repose.
//k"uru to pick up, scrape up.
_//k"we nicely.
//k"we:n !a stand with the back to.
//n, //n hut, house, home, s. //a\eta.
//\eta = //e - n go into.
//na to force to come.
//naä particle used with numerals, s. /na.
//naba wild onion.
 //naii beads.
_//nare a certain tree.
//oha cold.
//ora to lie beside.
//or//ar to clean.
 _//u to go down.
```

```
_//u: skin, hide.
//ũĕta to scrape up.
_{-}//um soup.
//amaro niece, cousin's child.
//an hut, home, s. //n, pl. //ansi.
//wa hill.
//wei to feel ill.
//wi the same, similar.
//xaba to cook, s. //ka.
//xai to know, to be able, s. //kxeki.
//xãu kudu.
//xau to cut.
//xduii blood.
_//xe to jump.
//xei sister, s. //ka:xe.
//xo: thread, s. //k"u.
//xóä Nama.
                                      *
\neq a:di to sing.
≠am gourd.
+amku, is industrious.
\neq^{\varrho} e people, s. \neq i.
≠eike river.
≠gã: winter.
\neq g\tilde{a}i to bring, to give.
_≠gãinja to collect (water).
\neq gam a fly.
≠gãuï to spread out, to span.
\neq gi: beads.
_≠goba to say to, to call.
≠gun petticoat.
≠haa to cut.
\neq i men, people, s. \neq e, \neq kui, pl. \neq ite.
≠i to fall (rain).
\neq k\tilde{a} to fill, dip up.
\neq ka out, there.
\neq ka: pipe of bone.
≠kai to cry.
#kdia straps of kaross put on the head.
```

*= kai to come to, to visit,

```
\neq k\tilde{a}i to go along, go through.
_≠kãi beautiful, pleasant.
≠kaika de _dau yesterday.
≠kam bullroarer.
#kama to carry wood, to tie up.
#kanaka play thing made of sticks and thongs.
≠kanaku wasp.
≠kausi small roots.
\neq ke in \neq um \neq ke backbone.
*\pm ke floor, bottom.
\neq ke:, \neq k\tilde{e}: to rain.
\neq kha ants.
\pm khai: to sew.
#khaui to throw, to hurl
≠khe: duiker, s. ome.
≠kheru midday.
#khomani a neighbouring tribe.
\neq ki salve, ointment.
≠kõ steenbok.
≠kõ: brother-in-law, sister-in-law.
\neq k\tilde{o}a pot.
≠kõi neck.
#koisi ball.
\neq k53 dog.
\neq k35se white stripes on springbok.
#kouke to arrive.
= \neq ku to come up (rain).
\neq ku: mouth, s. tu.
\neq kui man, s. \neq i.
\neq kuika in the morning.
\neq kan chest.
\neq kuri to rub, anoint.
\neq ku-ts? o seeds, pips.
≠kwa bedskin.
\neq kw \epsilon wind.
\neq kwen time, season.
≠kwi tail.
\neq kwi //a to scoop out, dig out.
\neq k"ei road, path.
≠k"óä to dance.
≠naui stick.
≠nóä to hit.
```

⁻≠nore ostrich egg, s. !ũi, ≠ũi:. ≠nui ear. $\neq o$: axe. $\neq \tilde{o}$ /ne to run about (water). #onike elbow. $-\neq \tilde{u}, -\neq \tilde{u}$ -u one. $\neq \tilde{u}, \neq \tilde{u}si$ to stay. $\neq u:ki$ tortoise, one kind. ≠ũi: ostrich egg, s. !ũi, =≠nore. ≠ú:ï evening. $\neq um \neq ke$ backbone. $\neq an$ to rise (sun). ≠wã to set down. $\neq xa:\ddot{a}$ naughty. $\neq xai$ youth. $\neq xi$ a certain tree. ≠xo needle. ≠xu: master.

◆bwd:a, ♦bwd:sa wood, stick, tree.
◆me duiker, s. ≠khe.
◆pa: son, pl. ♦pa:a, s. ♦pwon.
♦pwa, child, a big child, pl. ♦pwa /na.
♦pwai young.
♦pwa:xe daughter, s. ♦pxwe.
♦pwe, ♦pwi meat, flesh.
♦pwon son, s. ♦pa:,
♦pwonke screen of bushes.
♦pwösa golden jackal.
♦pxwe daughter, s. ♦pwa:xe.

A NOTE ON THE BUSHMAN ARROW POISON, DIAMPHIDIA SIMPLEX PÉRINGUEY

By MARIA G. BREYER-BRANDWIJK

During July 1936, an expedition from this University brought back, among other material, a supply of certain larvae used by the Kalahari Bushmen as an arrow poison. I am indebted to Professor Raymond A. Dart, F.R.S.S.Af., for generously placing this material at my disposal.

The larvae are in ovoid cocoons of a dark-brown colour. The outside of the cocoon is rough, the inner side smooth and shiny. The average size of the cocoon is 1.3 x 0.8 cm., while the curled larva is 0.8 x 0.7 cm. The average weight of the cocoon with contained larva is 0.2045 gm. About one half of the cocoons contained healthy larvae, while the remainder contained a sand-like material or shrivelled larvae surrounded and penetrated by fungi. The healthy looking ones only were used in my investigations, in view of Boehm's 1 statement that the fungi-infected larvae are less active. (See plate 106).

Both the cocoons and the larvae, brought in by Professor Dart, correspond exactly with the descriptions and figures given by Lewin² and Pawlowsky.³ From this and from the chemical and pharmacological tests carried out by me, it can be concluded that the larvae under investigation are those of the beetle, *Diamphidia simplex* Péringuey (D. locusta Fairmaine), Chrysomelidae. Both cocoon and beetle are known as Nga or Ngwa by the Bushman.⁴

The method of application is to squeeze the fresh larva between the fingers. The fluid which exudes is applied in rows of drops to the arrow heads and allowed to dry. Sometimes, plant poisons are used in addition to the larva.² According to Heubner,⁴ the game is shot from a distance and the wounded animal does not die for several hours. The following day the carcase is found by following the *spoor* of the wounded quarry. Before eating the meat, the arrow point and the flesh immediately surrounding it are cut away.

From time to time since 1884, travellers in South West Africa have brought back either arrows treated with the larvae or the cocoons. The arrows, cocoons, larvae and beetles have not only been described in detail but have also been subjected to investigation by many writers, e.g.

Boehm, Lewin, Pawlowsky, Heubner, Schinz, Chartell, Starcke, Perrot and Vogt, Haendel and Gildemeister and Santesson.

They record that the toxin can be extracted with water. The watery extract is acid in reaction and gives all the chemical tests for protein. The toxin is precipitated by alcohol and can be salted out with ammonium sulphate. The watery solution loses potency rapidly on standing and chemical manipulation has a similar deteriorating effect, while boiling immediately inactivates the toxin. All authors, except Heubner, report that the poison is a toxalbumin. Heubner claims to have separated the active principle from the protein but did not succeed in determining its nature.

According to these authors, the effects of the larva toxin resemble those of the toxalbumins, except that there are none after oral administration. Injected subcutaneously and intravenously, the poison is highly toxic, the symptoms being those of general paralysis. The action is enormously rapid after intravenous injection and there is much local irritation after subcutaneous injection. The toxin has also an haemolytic action.

The beetle is also apparently poisonous² but is less potent than the larva,² while the cocoons are non toxic.² The larva retains its toxicity for a long time after drying. Boehm¹ stored dried larvae over sulphuric acid for three years with no loss of potency.

According to Haendel and Gildemeister,⁹ it is possible to immunize animals against the poison. They state, also, that the serum of an immunized animal is capable of neutralizing the toxin *in vivo* and *in vitro*.

CHEMICAL TESTS

Twenty larvae were rubbed up with a small amount of warm water and the fluid filtered off, the yield being 16 c.c. The residue was again treated with warm water, the yield being 12 c.c. The filtrates were slightly turbid and acid to litmus. Both were extremely toxic to animals (see animal experiments a, b and c). Both extracts gave precipitates with picric acid, phosphotingstic acid, phosphomolybdic acid and Mayer's reagent, a blue violet colour with the Biuret test and a red with Millon's. On boiling the extract, a coagulum appeared and both coagulum and filtrate were non-toxic (see animal experiments d).

Eight cubic centimetres of the first extract were deproteinized by Heubner's method,4 which is as follows:—At low temperature a concentrated solution of the poison is dropped into twenty to thirty times its

volume of absolute alcohol. The precipitate is filtered off, dissolved in a small amount of water and treated with a small amount of 33 per cent. meta phosphoric acid. This causes an opalescence, which is partially filterable, after saturation with sodium chloride. This fluid is immediately filtered and the filtrate rapidly made just neutral with soda solution. It is then dialysed first against running water and later against distilled water. Heubner found the dialysed material still toxic, although less potent than the original material. The material gave none of the protein reactions.

I observed that at least part of my alcohol precipitate did not redissolve in water. I began with 8 c.c. of my original larva extract and after dailysing had 14 c.c. This contained no protein, all the tests being negative. It was also without toxicity to animals even after administering very large doses (see animal experiments e).

Considering the importance of Heubner's statement that, in a toxalbumin, the poisonous principle was capable of separation from the protein, I repeated his method for doing this. The process was applied rapidly to the combined first and second watery extracts from nine larvae. Again the dialysed material, which measured 125 c.c., was both protein-free and non-toxic (see animal experiments e).

OBSERVATIONS ON ANIMALS

- (a) 0.5 c.c. of the first extract, injected intravenously into a rabbit, killed it within a few minutes, there being marked convulsions and respiratory embarrassment.
- (b) 0.5 c.c. of the same extract (now twenty-four hours old) was injected subcutaneously into a rabbit. To begin with, there was little in the way of symptoms except loss or appetite. Some hours later, there was a progressive paralysis of the hind quarters. Two days later the animal died. The site of the injection was somewhat thickened but there was no abscess.

Doses of (1) 0.0085 c.c., (2) 0.0375 c.c. and (3) 0.075 c.c. of the same extract were injected subcutaneously into guineapigs. They all died with the same symptoms as the rabbit. No. 1 died six weeks, No. 2 two days and No. 3 some hours after the injection. A post mortem examination of No. 1 revealed a moderate degree of congestion in all the viscera and the scar of a healed abscess at the site of the injection.

(c) 0.6 c.c. of the second extarct, injected subcutaneously into guineapig, killed it within three minutes, with convulsions and severe respiratory embarrassment.

- (d) The second extract was boiled and very large doses of both the coagulum and the filtrate proved non-toxic on subcutaneous injection into guineapigs. Both animals showed no symptoms and are still alive and healthy four months after the injections.
- (e) 0.3 c.c. and 1 c.c. of the deproteinized product, prepared according to the method of Heubner, were likewise non-toxic on subcutaneous injection into guineapigs. Both animals showed no symptoms and are alive and well four months later. The doses correspond to 0.171 c.c. and 0.571 c.c. of the first extract, which it will be noted are far in excess of the doses capable of killing guineapigs. A second deproteinized extract gave similar results, the doses being this time still more in excess of the M.F.D.
- (f) In view of the similarity between the effects of the Diamphidia toxin and those of snake venoms, I thought it worth trying to see whether the Antivenene of the South African Institute for Medical Research would counteract the effects of Diamphidia toxin. A mixture of 0.25 c.c. of the second extract with 0.25 c.c. of Antivenene, after standing for an hour at room temperature (about 20°C.), was injected into a guineapig, The animal died on the 10th day after the injection, while a control, which received the same dose of the extract alone, died within twenty-four hours.

As the original extract was now exhausted, I made a further supply from eight larvae, the amount of extract being 28 c.c. Of this, the following amounts were mixed with varying amounts of Antivenene and allowed to stand at room temperature for an hour. They were then injected subcutaneously into guineapigs.

Extract.	Antivenene.	Results.
c.c.	c.c.	
0.3	0,3	Death in three hours
0.3	0.4	Death in four hours
0.3	0.6	Death in three hours
0.3	0.8	Death in two hours
0.3	1.0	Death in two hours
0.3	2.0	Next day, very weak, unable to stand.

The last animal then received a further dose of 4 c.c. of Antivenene. Its condition improved somewhat for three days but it ultimately died six days after the original injection.

The above results are suggestive that sufficient dosage of Antivenene will protect an animal from the lethal effects of the Diamphidia toxin.

Further observations, to prove or disprove this, were impossible through lack of Diamphidia material.

(g) Some experiments were then done on the antigenic properties of the toxin. To 20 c.c. of the extract (para. f.) 0.3 per cent. of formal-dehyde was added. This was incubated at 37°C. for two days. A guineapig, which received 1 c.c. of this subcutaneously, died in five days. It was apparent, therefore, that, although the toxicity had fallen a great deal, the material was still toxic. During the five days of this observation, the balance of the formalinized extract was returned to the incubator. It was then kept in a refrigerator (temperature 8-10°C.) for two weeks.

A rabbit was given 1, 2, 3 and 4 c.c. of the product subcutaneously on four consecutive days. A week later it was given the fresh extract from one whole larva (which represents several times a fatal dose) subcutaneously. Two days after this, it received the extract from two larvae subcutaneously. It was still alive and well four weeks after its first injection of the toxin. A control which received the extract from one larva subcutaneously died within twenty hours. The immunized animal had, however, developed a large open sore at the site of injection and there were three other septic lesions on its skin and it was very emaciated. It was therefore destroyed. *Post mortem*, the organs appeared healthy to the naked eye. It is clear that this animal had been protected from the toxic action on the nervous system although not from the local destructive effects.

(h) An attempt was then made to see whether the serum of an immunized animal would neutralize the Diamphidia toxin. A rabbit was immunized as under paragraph (g). One week after the last dose of detoxicated material, it was bled. The animal was by this time in very poor condition, and it proved possible to obtain only $2\frac{1}{2}$ c.c. of serum. This was mixed with the extract from two larvae, which represents a very large dose, and was injected subcutaneously into a rabbit. It died within fifteen hours and so did a control which received the same amount of larva extract. It was impossible to repeat the observation, using smaller doses of larva, as the supply of larvae was now exhausted. Post mortem, both rabbits showed irritation at the site of injection, congestion of the liver and kidneys and some congestion of the stomach and intestines, which last may have been due to post mortem changes.

CONCLUSIONS

1. The Bushman arrow poison used by the Kalahari Bushmen is almost certainly Diamphidia simplex Péringuey (D. locusta Fairmaire), in use by other branches of the Bushmen,

- 2. The larvae have a high degree of toxicity.
- 3. The toxin appears to be of the toxalbuminous type and its toxicity is destroyed by boiling.
- 4. The toxin cannot be separated from the protein as stated by Heubner.
 - 5. Rabbits can be partially immunized against the toxin.
- 6. There is some evidence that the snake venom Antivenene of the South African Institute for Medical Research may counteract the effects of the toxin, especially those on the Central Nervous System.

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SOME NOTES ON HEALTH AND DISEASE AMONG THE BUSHMEN OF THE SOUTHERN KALAHARI

By J. F. MAINGARD

During our sojourn at Bain's Camp in the Southern Kalahari in the winter of 1936 I was able to make a few notes on health, medical knowledge and customs of the Bushmen of this region. In this article I propose to confine myself chiefly to a discussion of the first two topics, leaving their customs to be considered elsewhere excepting insofar as the nature of the subject makes it necessary to refer to them.

The situation of the camp in the arid sand dune country on the edge of the Kalahari Game Reserve near the junction of the Auob and ! Nosop Rivers, did not offer much opportunity for the collection and identification of medicinal or food plants. Nevertheless we were able to gather a good deal of useful data in spite of the inhospitable character of the area in the immediate vicinity of the camp.

It is amazing to find, on consulting the available literature, how little is known about the Bushmen of this part of the country despite their contacts over a number of years with the White people.

Most of my information was derived from two informants, /khanako, a woman of approximately 45 years of age, and Molopo, a young male adult. Their medical knowledge did not appear to be very extensive, although they seemed to know more than most of the others. It is probable that what traditional medical knowledge they once possessed, is, under the influence of civilised contacts rapidly being lost. Some writers assert that witch-doctors are found among the Bushmen (cf. Dornan p. 141), but, as far as could be ascertained, there was no individual with the special functions of a medicine-man or witch-doctor among this group of Bushmen; nor did it appear ever to have been the practice with them, as with so many other South African tribes, to invest any particular person with these functions. Acts of a magical or therapeutic nature could, as we shall see later, be equally well performed by any member of the group. If there ever were witch-doctors in this tribe, it must have been so long ago that even their very memory no longer remains with their descendants.

We may consider the health of the Bushmen from two aspects. Firstly, as we saw them in their more or less natural surroundings at Bain's Camp, and, secondly, after they were transferred to Johannesburg

for the duration of the Empire Exhibition, when they came under the care of Drs. Gear and Ryman to whom I am indebted for some of the information concerning this latter period.

Although it might be thought that their relative isolation and their open-air life would keep them in good health, it was found on closer examination that such an assumption would not be altogether correct. They had not entirely escaped those two scourges of civilisation—tuberculosis and venereal disease. Nor had they that entire freedom from another condition-arteriosclerosis commonly associated with the high pressure life of modern civilised man, which their relatively simply life in the veld might be supposed to give them. Old Abraham showed wellmarked arterial degeneration, and in uye we found an enlargement of the heart which finally caused his death in Johannesburg. Furthermore it was quite obvious that in the past they had suffered from malnutrition which always creates a favourable soil for the seeds of disease. Hence the general standard of health although high, was not so good as might have been expected in a group otherwise so well-situated to withstand the onslaughts of ill-health. The causes of this surprising observation must be sought in the changes which have taken place in their environmental conditions within recent years, leading to what amounts to a revolution in their ways of living with far-reaching social and economic effects, both for the Bushmen themselves, and for their neighbours in this border region. The sociological phenomena associated with the migrations of the various coloured tribes of the district, with the incursion of the White settlers along the river-beds, and the displacement of the Bushmen from their ancestral water-holes and hunting grounds by the influx of these elements, makes a fascinating but hitherto little-known page of history, to which insufficient attention has been paid, but supply the answer to many of the questions which arose during the course of our investigations, and, no doubt, to many of the problems which, in the shape of the "Bantu Question," are exercising the minds of so many of our politicians to-day.

The repercussions of these events were then mainly of an economic nature, and they affected the health of the Bushmen in three ways. First, by the introduction of the diseases previously unknown among them. Secondly by bringing about an alteration in their diet both qualitative and quantitative. How this arose we shall see later. And thirdly as a result of these changes in the diet leading to malnutrition, they have been rendered more susceptible to disease. Besides these effects there have been, naturally, the concomitant social effects which always occur when a higher culture comes into contact with a lower culture and

which always produce the same result, namely disintegration, or at least gross modification of the lower culture. As a consequence of this many of their old customs are to-day nearly extinct or altogether lost.

The facts on which some of the foregoing statements relating to the incidence of contagious disease are based were brought to light by a routine medical examination of the Bushman group at Bain's Camp. There was no clinical evidence of venereal disease among them,1 but they are familiar with the condition under the name of "vuilsiekte" and they have a cure for it in the shape of a root $\neq kharisi$ or "iongetileshout" from which a decoction is made. Further, two or three of the men had received treatment for it at Upington some time before. One of the children, \neq amme, showed numerous indurated skin eruptions on her thighs and buttocks, which were strongly suggestive of vaws. There were two individuals with evidence of old, healed bone tuberculosis. /alop@wa, with a glandular swelling below the right ear and below it the scar of an old sinus. There were also numerous sinuses in the sacral region and a thickening of the posterior and of the right eighth rib. And ari or tsaap presented several healed sinus scars on the left hip. He gave in addition a history of cough and haemoptysis in the past from which he recovered after prolonged hospital treatment.

· Nasal catarrh and conjunctivitis were found to be extremely common, at one time they assumed epidemic proportions and proved to be difficult to control on account of their unhygienic habits. However, by the liberal use of argyrol and olive oil instillations it was found possible to produce a striking improvement in the course of the affection and by the end of three weeks it had practically disappeared. It was impossible to say without laboratory facilities what the causal organism was. It did not appear to be of gonococcal origin for it was a much milder affection than the usual gonococcal ophthalmia. By some it is attributed to unseasonable mild weather such as we were having at that time. Yet in certain of the old people it could be seen that the eyes had been affected for many years and that the condition had become chronic. leading to marked scarring and entropion. It is possible that the combined action of the sun and the wind and the sand of the desert over a period of years play some part in the etiology of this condition. Malaria, known to them by the Dutch name of "swartsiekte," does not occur as a rule in this dry climate, but in exceptionally rainy seasons suitable conditions for the breeding of malaria mosquitoes arise. It was

Evidence suggesting an old-standing tertiary syphilitic infection in the shape of aortic incompetence was detected in one of the older men.

particularly prevalent during the severe floods on the Molopo and the !Nosop four or five years ago when they suffered severely from its ravages and many children were lost. As a cure for malaria they use the root of the vaalbos (//kabukasi) in several ways. A warm decoction is used in colds and fevers and a plaster made from the root is applied to the head and temples of a child suffering from headache. The leaves are burnt in the sick room and the smoke is alleged to cure fever. Skin eruptions and erythemata of various kinds are not differentiated in any way, all being classed under the generic name of "roos," also borrowed from the Afrikaans.

Other infective conditions seen included ringworm of the scalp, and recently-healed breast abscesses. Acne did not appear to be common, only one instance of this, in a young male, being encountered.

Quite a number of benign new growths and developmental anomalies were met with. Two individuals presented lipomata, one of the chest and abdomen, and the other in the lumbar region. Another had an umbilical mole, and yet another warts at the angle of the mouth. In one female we found evidence of uterine fibromyomatosis. These findings serve to demonstrate the fallacy of the well-known and widely circulated canard that neoplastic diseases do not occur in the more primitive races of mankind. We did not however discover any malignant growths in the Bushmen, although there is nothing to show that they do not suffer from them just as the other Native races of this country do.

The umbilical hernia in one of the infants and the inguinal herniae found in two men may be classed as developmental abnormalities. Cataracts were present in several of the older people as was to be expected, this being a common finding in tribes leading an open-air life.

With the transference of the Bushmen to Johannesburg for the Empire Exhibition dire consequences were feared and it was freely stated in the district that the Bushmen would all die of pneumonia. Hence it was with some trepidation that we watched over their health after the transfer was made. Pneumonic infection actually occurred, but only in an old woman and in one of the infants, and not on the large scale that was feared. In order to prevent this complication as much as possible, the South African Institute for Medical Research was asked to prepare a vaccine for us from their nasal flora, but as the investigation performed by Dr. D. Ordman revealed no new strains of organisms, it was decided to use the stock anti-pneumonic vaccine prepared by that institution for inoculating the Bushmen. No other cases of pulmonary infection arose while they were in Johannesburg, although some of them had attacks of

acute bronchitis. There were two cases of diarrhoea both of which cleared up with suitable treatment, and another in an infant which died in hospital. A number of them developed a papular rash which was considered to be dietetic in origin on account of its long duration. This gave no trouble and disappeared spontaneously. Thus the gloomy prognostications mentioned above were certainly not fulfilled, although it is quite obvious that their powers of resistance to infectious disease were not exceptionally high. However, taking into consideration the adverse conditions to which they had previously been exposed, they must be regarded as remarkably healthy people. A similar group of White people in the same circumstances would undoubtedly have shown much more deterioration in health than the Bushmen.

In most of the subjects examined the teeth were excellent in spite of the unsatisfactory nature of the diet during, at least, part of the year. Only a few carious teeth were discovered. This accords well with what we know of their teeth from other writers (see Schapera, p. 57). The method of cleansing the teeth generally employed is attractive in its simplicity; they are picked clean with any convenient piece of grass immediately after eating. A number clean the teeth with ashes in addition, but this practice is by no means universal. It is of interest to note that an inspection of the teeth of the children at the camp revealed, in some instances, exactly the same order as was described by Drennan in fossil Bush skeletons (loc cit). Further information on the teeth of these people will be available later when the results of a detailed study by Mrs. Laing are published.

The personal hygiene of the Bushmen is extremely rudimentary. They have no notions of hygiene at all. Possibly owing to the scarcity of water in the Kalahari, baths are unknown to them. Instead they are very fond of smearing their bodies with fat or, when obtainable, vaseline, which serves the double purpose of cleansing, rather unsatisfactorily may it be said, the skin, and keeping it soft. They also have the curious custom not hitherto described, or at least not by the authorities available to me, of decorating themselves with the blood of freshly killed animals. Thus one day when a goat was slaughtered, I saw some of the children covering their legs and faces with the blood of the victim, tracing with their fingers various patterns according to their fancy. On enquiry I failed to elicit any special ritualistic significance attached to this practice.

Some quaint notions about pathology are current among the Bushmen. They believe that pain on any part of the body is due to wind

settling in the affected part, much as wind causes discomfort in the stomach. The soothing effect of a bag of hot sand applied to the affected region is explained on the basis of this theory by saying that the heat drives the wind out.

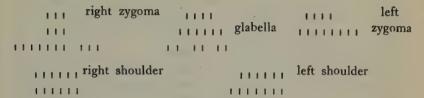
To the kidneys of the little animal known as the *tlusi* or bakoor jakkals, almost miraculous properties are attributed. It is confidently asserted that they are good for any disease under the sun.

They possess knowledge of several plants of medicinal value, besides those mentioned above. Of the two plants which grow in the vicinity of the camp, one, the perdebossie (xasi) is used for sores, the mashed root being applied as a poultice, the other is used for "sore stomach." The roots of several plants from the Kuruman River were shown to me, but it was impossible to obtain specimens of these. The baarmoederhout (!kasi@wa) it is said is given to "'n meisie na die kind se geboorte," i.e. an extract of the root is used to clear out the uterus after childbirth. The root of the gemsbokstert (!kaikei) a black bush with flat leaves, is utilised in the form of a decoction for diarrhoea. Nowadays, of course, they have also become familiar with the European medicines which the farmers give them, and they have acquired great faith in Epsom salts as a general panacea.

Various forms of mutilation are practised by them, some for theraputic purposes, and others of an obviously ritualistic nature. These mutilatory practices are now falling into desuetude, and will soon no doubt be totally abandoned. Even now it is rarely that these mutilations are seen in the younger members of the group. The amputation of the terminal phalanx of the left ring finger recorded. among others, by Schapera (p. 69) was seen in one of the women where it had been done soon after birth because it was feared she would die in infancy.1 Scarification was performed for the relief of aches and pains, usually by the father (cf. Schapera p. 70). Thus one individual had scarification marks on the forehead and temples for headaches, and another had similar marks over the loins as a relic of an attack of backache and haematuria, while a third had been incised on the front of the thigh for rheumatic pains, this time by the maternal uncle. From this we see that Schapera's statement that scarification is unknown south of the Molopo is quite incorrect. Many of them, both male and female, had the ears pierced for the wearing of ornaments. Sometimes a circle of sinew is placed around a limb to prevent the spread of pain.

¹ This custom and its distribution in the group was more fully enquired into by Professor M. R. Drennan during the visit of the Bushmen to Cape Town in 1937, and has been the subject of a separate report by him.

Another form of scarification is that practised in connection with the initiation ceremonies of the boys into manhood, called by them the "gemsbok play." These markings could be seen in practically all the older men. Their arrangement is seen in the accompanying diagram. The pattern shown is a typical one although in many of them it is not so complete:—



To show how rapidly they are forgetting the significance of these incisions, and all the ritual connected with them, we may quote the answers which were made to our questions about them. One man said that he did not know why they had been made, and another, the only one to tell us this, that his had been made when he was younger by the old men as part of the "gemsbok play." Some of the younger boys had apparently attempted to imitate these marks in play, and this is the probable explanation of the irregular scars which were found on the shoulders and arm of a boy who said that he and his companions of the same age had done it while playing. We can see here how important was the gemsbok formerly in their social and communal life, and how it entered into every phase of their activities, for the concept of the gemsbok was involved in the girls' puberty ceremonies also, as well as in their other activities. Now with the disintegration of their culture it is losing that importance to a large extent, although it can never, until it is completely exterminated, altogether fail to have a certain significance for them as the concept around which centres their whole social system.

The importance of the gemsbok in the social life of these people is noteworthy; one cannot help being impressed by it as one gets to know them more intimately. It pervades every aspect of their communal activity, and forms as it were the focal point of their lives, the centre around which hinges all their philosophy, all their habits and customs. The Bushmen's horizon, one might say, is bounded by the gemsbok. I hope to elaborate this factor in Bushman life more fully in a subsequent contribution.

The old custom of scarification is now generally abandoned, or, in some cases, replaced by tattoing in the European fashion as seen in the case of one man who has copied from a discarded picture book several

coloured patterns on his arms and chest, and has added a novel form of decoration in the shape of three blue dots on the forehead and on each cheek.

The dietetic habits of these people have been much altered in recent years by contact with civilised or semi-civilised races which has brought about profound changes in the mode of living, some only seasonal in character, and others permanent. The influence of civilisation has been so to modify their environment that they have had to settle down as servants on the farms of the district or among the Coloured people. To understand how this came about we shall have to make a short incursion into the history of this region. Formerly the Bushmen were the sole occupiers of the land, enjoying full possession of the relatively fertile spots around the waterholes around which the whole life of the land centres. The master of the country is the one who is master of its water supplies. Then came the Coloured people—Hottentots and half-breeds calling themselves Bastards. They looked down on the Bushman as an inferior race, and squatting on the land around the waterholes, drove him away further into the desert. As a result the Bushman was forced to come to the Hottentot for water. Hence the Hottentot became the overlord of the Bushmen and he was constrained to do his new master's bidding. Later when White men began to settle in the country the Bushman was dispossessed of what little territory remained to him, with the advance of civilisation game laws were introduced, and the plight of these people, driven from their hunting grounds and from their lands, became indeed parlous. Some of them worked for the White man instead of the Coloured folk only to find that they were no better off. Food was scanty and unnourishing, long hours of work monotonous; the Bushman is at the best of times incapable of steady work, it is not in his nature. Hence desertions from service were frequent. The farmer armed with his contract would prosecute, and again the long arm of the law would be invoked to prove to the Bushman the error of his (and his forefathers) ways by committing him to the paternal care of the Government in the shape of imprisonment. It seems ridiculous, although it appears the attempt is being made, to attempt to change the whole way of life, and this means also the customs, beliefs, traditions, and habits, of a race, by means of legal enactments. History has proved over and over again that it is impossible except you destroy the race in the process. And indeed this is actually what is happening now. Unless the Government realises this soon, the last of the Bushmen in the Union are doomed, in fact they have now almost disappeared as a racial unit.

We can see how strongly the Bushman is still attached to the life of his forebears by the fact that they still retain their nomadic habits to this extent that whenever possible, that is to say, in the tsamma season, many of them go "out on the tsamma" and resume their old wav of life for a time, i.e. as long as the tsamma lasts. During this time they subsist by hunting and their diet consists of game1 and veldkos of various kinds, namely tsamma (citrullus vulgaris) which grows plentifully in the desert at certain times of the year, and then serves as the staff of life for man and beast, uintjies (bulbs), berries, wild cucumbers (Kalahari concommer), "Bushman potatoes"—a species of truffle, and grubs; in addition they use small amounts of European food-stuffs mainly coffee and sugar, which they obtain from the storekeepers in exchange for the skins of the tlusi (bakoor jakkals) and other wild animals. On the farms the diet consists chiefly of mealie-meal and coffee, with separated milk, a little tea and sugar, and, occasionally, a little goat and sheep flesh. It is no more liberal in quantity than it is in quality. Typical diet on the farms is as follows: eight beakers full of mealie-meal per family per month and an oil tin of separated milk per day. It is not surprising that malnutrition is rife among them.

They do not take meals at fixed times, eating whenever they feel inclined. Usually the big meal of the day is eaten just after sundown. Cooking methods are primitive. I had an opportunity of observing something of their cooking methods when out hunting in the veld. A kill was made and we camped near the kill. The Bushmen straightaway began eating the fresh meat, braising it on the coals of the camp fire. The meat so cooked is half raw, but they have no difficulty in tearing it to pieces with their strong jaws. They can consume astonishingly large quantities of meat in this way, Dornan (p. 117) gives a good account of the Bushman's potentialities in this respect. The use of salt appears to be unknown to them.

In build the individuals of this group of Bushmen were all of the slender, athletic type, in fact they might be termed hyposthenic, with some of them verging on the sthenic. Steatopygia in the woman was, in most instances, a well-marked feature. They appear to be poorly-nourished but this appearance is somewhat deceptive for in reality they will travel long distances in search of game. In Bleek (loc. cit. p. 311) it is recorded how they will pursue an animal the whole day long until

¹ Principally the gemsbok which is very plentiful in this area, and as we have said before plays a large part in the daily life, customs and magical beliefs of the Bushman. The Union Government has recently given proof that it appreciated the importance that the gemsbok has for these people, by granting them permission to hunt it within the limits of the Kalahari Game Reserve.

it falls down exhausted. Although on the one occasion on which I accompanied the hunters they only travelled about 16 miles, I feel sure they could have covered much more ground with ease for they were not in the least fatigued. I had no opportunity of discovering whether they were actually superior to other races in this respect as is sometimes stated (Dornan p. 100). In spite of all the factors tending at the present time to threaten the health of the Bushmen, it would seem that the infant mortality owing to the rigours of their desert life, is high, but that the survivors enjoy an expectation of life which is not inferior to that of the European. Old Abraham, the leader of the group, was reputed to be well over a hundred years old, his age being attested by the memory of historical events which he himself had witnessed. The attainment of a ripe old age is by no means uncommon among them.

Families are small, few couples had more than four children, and most fewer. This limitation of families is due to nature alone for in bad seasons they are not prolific, and in addition many of the weaker infants die owing to lack of adequate nourishment. This is borne out by the fact that the age groups among the children are very unevenly distributed, for instance there were very few in the age group 15-18, suggesting that, either there had been few births during the period represented by this group, or that most of those borne at this time had failed to survive. It does not seem that they ever deliberately put infants to death, they are too fond of their children to do this, although this custom has been recorded in other Bushman tribes (Schapera, p. 116.)

There do not appear to be any special ceremonies connected with childbirth, although I was not fortunate enough to witness a confinement while I was with the Bushmen. Delivery usually takes place in the hut, and the patient is attended by the old women of the camp. Obstetric interference is limited to massage of the abdomen in an effort to assist the onward progress of the child. After birth the umbiligal cord is not cut, it is ligatured and the placenta allowed to slough off. This custom is not found in other Bushman tribes (Schapera p. 113), it is found however among the Hottentots and is probably borrowed from them.

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THE STUDY OF AFRICAN MUSICAL RHYTHM

By A. M. JONES

Those of us who are interested in the study of African rhythm, or indeed of any branch of African music, must view with not a little apprehension the growing use by the Bantu of the gramophone and of European dance rhythms. In towns the old Native rhythms are dying out, and even in the villages, the young men returning from work are introducing western forms of music through gramophone records or through the "Europeans' Dance" which they learnt while at work. Other branches of Native life are receiving their share of investigation, but music lags sadly behind. The writers of books on tribal customs have a habit of mentioning music and then apologising for the fact that as they are not musicians, they feel incompetent to deal with the subject: which of course is a good thing, but it is at the same time a clear call to musicians to bestir themselves. For if something is not done soon, it will be too late.

A certain amount of research work on African music is going on, but it is being done by isolated individuals who pursue their own methods quite independent of one another. The result is that the present state of musical research is chaotic—nothing less than that. No investigator knows on what lines the other man is proceeding; be does not know what method the other man used in making his transcriptions; he does not know what criteria the other used in order to test the accuracy of his transcriptions. And the natural consequence of this is, that no one investigator can trust the other man's work. He cannot depend upon it for formulating theories, as he does not know what degree of reliability it possesses. This is hopeless and entirely unscientific. We shall never know the secret of African musical rhythms if we go on in this fashion.

Africa is a large country; tribes living in various parts have widely differing musical practice; yet there is sufficient evidence to warrant the suspicion that underlying these practices there is a common ground of rhythmic structure. But at present no one can tell what it is. Yet if this suspicion is correct surely it is imperative that there should be a close co-operation between musical researches carried on all over the continent, so that results may be comparable. The writer of this essay feels strongly that the time has come when some body of musicians should draw up a

scheme of procedure in investigation of musical problems, and that this body should invite all research workers to conform to this procedure. Were this done, then we should all feel that our transcriptions possessed equal validity and we should feel able to use each other's work in furthering our own studies.

The particular purpose of this essay is the study of the recording of African Rhythms. In whatever branch of music research is done, the investigator is almost at once brought up against the difficulty of putting the music down on paper, not so much because of the melody itself but because of the rhythm of the melody. The rhythm is clearly felt, but it is most difficult for a European to "nail it down" and to transcribe it accurately. Yet anyone who has done work on African music knows that African rhythm is absolutely fundamental. It is the purpose of this essay to consider the methods of recording this rhythm, and it is hoped that in the process, some principles of African rhythm may be made clear.

As the writer has experience of the practices of some of the tribes in Northern Rhodesia only, it should be borne in mind that any deductions or conclusions made from musical examples quoted in these pages refer to these tribes only. The tribes are: Tonga, Bemba, Nsenga, and Lala.

1. The Problem of Recording

The two methods of making transcriptions of African music or percussion playing which are in common use are first direct transcription and second, the making of a gramophone record from which a transcription is made.

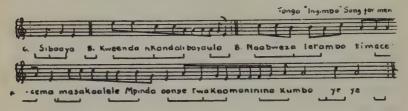
Consider the Direct Transcription method. The investigator listens carefully to the music and when he is sufficiently certain that he knows that is being sung or played, he writes it down. The careful person will check his transcription not once nor twice. What exactly happens in this method? The African music passes through a European ear, is analysed by a European brain which instinctively inherits the musical attitude of the West, and is then duly transcribed. A more subjective process it is hard to imagine. It may be successful in easy passages, by which of course we mean those passages which are similar in structure or melody to European music, but when it comes to hard passages, every one who has tried this method knows that it breaks down. We simply cannot be sure what the African is doing. And it is exactly these hard passages, by which we mean those parts which are characteristic of African as distinct from Western music, that we want to be sure about. For therein undoubtedly lie the secrets of the principles that

govern African music. In other words, by the direct transcription method, we can put down what we already know, but in the nature of the case, we can never find out that which is foreign to our experience. At best we can only put down what we think the African does. Which of course is useless for scientific purposes. To test the truth of this contention we invite the musical reader to do as we have done. Listen to a party of Africans singing. Write down the apparent melody, taking care to get the rhythm right. Now send for one of the singers, and ask him what words he was singing. Jot these down and try to fit them in to your melody. You will probably be quite non-plussed; there are far too many syllables. The fact is that the European ear catches merely the apparent tune, and in so doing, instinctively moulds it in a westernised shape.

Let us make another test. Select a sensible singer, and let him sing to you. You will first write down all the words he sings under the stave of your blank page of music paper. He then sings repeatedly and you fill in the melody. In this case clearly you have the advantage of knowing that you have to account for every syllable, and your transcription will therefore be far more trustworthy. When you have finished, your singer says that the people always clap to this song. You tell him to sing and clap—but when it comes to marking in on your score the exact positions of the handclaps, you will almost certainly acknowledge yourself beaten. It is here that acquaintance is made with the pecularities of African rhythm, for it is plain that the handclapping by no means follows the natural rhythm either of the tune or the words. Yet the words are rhythmic, the tune is rhythmic, and the clapping is rhythmic. At once we notice that whereas the tune though rhythmic, was somewhat free in its rhythm, the quavers were not always quite quavers, and the rests had a length which defied exact counting, the clapping has a certain and relentless and regular rhythm. It becomes clear therefore, that if only we can get the handclapping correctly marked on our score, we shall be on the way to checking the rhythm of the song; in fact if our rhythmic transcription of the song agrees with the handelap, it is quite certain that it is a correct and scientific transcription. After years of living among the Bantu and listening and struggling to master the clapping, it is possible to attempt to mark in the claps. But even this is possible only if the singer is a fairly educated person who can discipline himself to go slowly and to emphasise the syllables on which the clap occurs, and such persons are rare. It is indeed, incredibly difficult for the experienced musician to write the claps in at all, and quite impossible for him to write in claps of difficult songs, and when all is said and done, all he can say is, "This is what I think the African did." Which of course is subjective and quite

valueless for scientific research. We do not want to think, we want to know.

Here is an example to illustrate the points made in the above paraparagraph.



The words were first written under a blank stave. Then the melody was sung, first as a whole, then bit by bit, and was noted down with as great care as possible. Next, the singer clapped the hand-clap rhythm. It is a familiar Tonga hand-clap, which the writer always represents as:

Lastly, an attempt was made to mark in the claps on the manuscript. Bearing in mind that the rhythm of the claps is inexorable, if the reader looks carefully at this example, he will see how inaccurate the first transcription of the rhythm of the song was. And what should it be? In some places the necessary emendations are clear; but not so in others. We leave the reader to try to correct the time value of the melody notes. In marking the clapping, attention was fixed on the words and not the time, as it is easier to tell on what syllable rather than on what note a clap occurs. The clap-marks here as as accurate as it was possible for the writer to get them.

Our African now goes on to say that really this song with its handclapping is properly only sung at a dance, and is an accompaniment to the drumming. So the Direct Method transcriber goes to listen to this drumming for he realises that his transcription will not be complete unless it contains the drumming correctly put in and related to both the singing and the clapping: in fact he ought to realise that up to this point he has tecorded only the embellishment of the real piece, which is the rhythm of the drums. But let it be stated categorically that if our investigator listens to that drumming for a life-time, he will not, by pure listening, be enabled to write down the rhythms of each drum, let alone put it down in correct relation to the singing and clapping. The European is here completely out of his depth. There may be as many as four drum rhythms crossing each other: by this we mean that the first beat of the bar of one drum is not the first beat of the bar of any other drum. Each drum has its own starting point, and the combination of these cross rhythms produces one firm resultant rhythm which is that heard by the outside observer. Added to these four cross rhythms, there is the handclapping which again crosses the drum rhythms, and the singing which crosses them all. The transcriber has to listen to six variant rhythms simultaneously, and each rhythm has its own main beat which may not coincide with that of any other. Mr. Reader, this is quite beyond the most brilliant musician. It simply cannot be done. It is in the combination of singing, clapping and drumming that we obtain the full impression of the characteristics of African music, and we cannot fail to realise that it is basically different from our own music. At the same time, here is something natural to the African, and although it is incredible and incomprehensible to us, surely there is here something vital. One feels convinced that the rhythms move according to rule; the whole pattern is shapely and intensely musical, yet it evades us. In seven years of close study, and with the expenditure of not a little brain work, and even after having mastered the drum rhythms of each drum in two separate Bemba dance drummings, by learning to play them, the writer has not been able to identify a single example of either handclapping or singing so as to be able to transcribe either of them in correct relation to the drumming. The subjective method here shows its inherent incapacity to deal accurately with the problem of recording.

From time to time, there appear in magazines or elsewhere, articles on Native music containing examples of tunes which so it is said were heard in such and such a place. If, as is probable, these examples were noted down by direct transcription from listening, one is fairly safe in stating, that they may be accurate, but that they are almost certainly wrong at those very points on which we need enlightenment if we are to solve the problems of African rhythm.

The indictment is not yet ended. Consider the Kalimba or "Kaffir Piano." The African learns to play a tune on this instrument by sitting near and watching another player day after day, until he has memorised both the tune and the fingering (or rather, thumbing). The consequence is that all Kalimba tunes have a large number of variants. And this peculiarity of the Kalimba exists not only as between player and player, but is one of the features of the music itself. A good Kalimba player in playing the inevitably short motif over and over again, plays it with a surprising number of variations. Therein lies much of the charm of this

music. But therein lies also the difficulty of recording. Kalimba playing proceeds at a great pace; and it is very rarely that we come across a player who can play the tune at any speed other than the one he has always used. Therefore our direct transcriber has to try and memorise the tune complete. He might possibly do this with a simple tune—it can be done-provided that the player does not put in the variations. But the African will almost certainly put these in, and anyhow, what we mean by a simple tune is often that sort of tune which conforms most nearly to our idea of music. Its value for research purposes is therefore almost negligible. And when all is said and done, and the transcriber flatters himself that he has successfully recorded a Kalimba tune, which he justly regards as a tour de force, he can only say, "I am practically certain that this is what was played." He cannot say, "I know," and he has no means whereby to measure the accuracy of his transcription. His transcription is an untrustworthy document, and it would be hazardous to use it for studying those particular points in which African music differs from our own.

Having thus ruled out direct transcription as an impossible method for scientific study, we turn to the second method, whereby a gramophone record is first made. Here we have something which is mechanically accurate. We have no doubt but that the record contains, and when played gives forth, every sound which was produced by the African performers. The record has further the great advantage that it can be played over and over again; it can also be slowed down so as to give the transcriber a chance of catching the difficult parts. In passing, let it be stated that we are not here considering for a moment the "armchair scientist." To attempt to transcribe records apart from and away from the African performers is sheer futility and is doomed to dismal failure. We have in mind the student who, while having access to his African performers, yet considers that to make a gramophone record of the piece will result in a more accurate transcription.

It is conceivable that he will produce a better transcription. Yet in principle it is difficult to see where this method differs from that of direct transcription. For the same sounds have to go through the same European ears and brain, and whatever difficulties were encountered in the first method, will be met with again here. The passages which are difficult are difficult because they are foreign to us. Our mind cannot cope with them. They defy analysis. Moreover with drumming, instead now of hearing the distinctive timbre of each drum, we are confronted with a dead level of drumming beats, as the gramophone declines to register quality of drumming as distinct from the volume of it. Nor

can we decipher which hand the player used for which beat, so that the gramophone cannot reveal the technique of performance. This applies also to records of Kalimba playing. We cannot tell which thumb the player used for which note: we do not know if there is anything interesting to be learnt here, and even if we slow the machine down as far as possible, it is very doubtful if we could catch many of the lower notes of the tune, which are usually played simultaneously with higher ones, and which being by nature very quiet, as the keys are not large enough to produce a rich sound, would be undecipherable. And even were we to claim to ourselves a measure of success in transcribing the gramophone records, the transcription would only be what we think the Africans did, and the worst of it is that we have no external criteria which we may apply to the transcription to test its accuracy. We have to take the transcriber's word for it: a position which would not be tolerated in any other branch of scientific research.

The gramophone was hailed as a great acquisition in the study of African music. It certainly has its uses. It enables us to hear music from many different tribes. We might concede that in this respect it is of value for ethnological purposes. But as the handmaid of the scientific study of African rhythm, it is of no more value than the direct transcription.

To sum up: African music urgently needs research work; what work is going on has no sort of co-ordination: the little work that has been done in reducing African rhythms to writing is of doubtful value for scientific purposes. It is, one hopes, not uncharitable to say that there is hardly an example of African rhythm in existence on which one would feel safe to build a theory. And the reason for this is first, that there is no common ground of procedure, and second, that the two methods of recording in common use are in the nature of the case, inadequate for the purpose. Research conducted on these lines is far from satisfactory. The whole problem of African rhythm is being viewed constantly through European-tinted spectacles. The subjective element is dominant: the value of the result is more than questionable. It stimulates interest but not conviction. It exposes the problem to wild hypotheses and theories for which there may be not the slightest trace of demonstrable and unassailable evidence.

2. The Scientific Approach to the Problem of Recording

All scientific investigation aims at being as completely objective as is humanly possible. It is the very opposite of the subjective process. The greatest possible safeguards are taken to eliminate the pusonality of

the investigator. Experiments are planned as objective tests, giving objective results. The validity of the experiment must not rest on any subjective element—this is the scientific ideal. Thus the experiment is capable of repetition by different persons, and should give the same results: and the experiments are so arranged that those results are objective and demonstrable evidence. Further, the scientific investigator in whatever field he is working, tries to arrange his experiments that they shall have results which are mensurable—capable of being measured accurately, and if possible, arithmetically.

The scientific investigation of African music, therefore, should and must proceed on these lines. It should provide mensurable results. This statement may shock those who, regarding music purely from the artistic point of view, feel that it is indefinable, immeasurable, enshrined in the sanctity of the soul. They may feel outraged at the very idea of measuring music with a yard-stick. But let us come down to earth. In so far as music is constructed on regular rhythms, it is based on something which can be counted, and indeed counted with the utmost arithmetical precision. We can count how many movements there are in a piece; further sub-division tells us how many bars there are in a movement; and finally not only can we count how many beats there are in a bar, but we Westerns have made our music so mathematical that we can count how many sub-divisions of a beat there are in a beat.

Approaching African music in this scientific frame of mind we find that we are of all investigators, most fortunate. For one of the chief characteristics of African music is its rhythms, which are not only invariably present, but also invariably regular in structure. In Northern Rhodesia, for example, however many instruments or voices are employed simultaneously, and on whatever beat of each others' bar they start, the resultant rhythm of the piece has either 6, 8, 12, or 16 beats to the bar. This is common to all four tribes under the writer's notice, and he has never come across an exception to these divisions. It is not necessary at this point to discuss the significance of the word "bar" as here used. It's use will become clear in the musical examples that follow later. It is sufficient to say that the word "bar" is intended to mean the natural division of the piece into regularly recurring rhythmic units.

As we have stated before, nearly all African singing is based on some sort of percussion rhythmic understructure. It may be handclapping. This clapping has invariably a mechanical accuracy. It may be drumming which again is obviously mechanical in its rhythms. It may be a pounding song, where the song follows the relentless rhythm of the

pestles. It may be a mining song where the rhythm is that of the striking of the rock drills. It may be a canoe song, in which case the underlying rhythm is the beat of the paddle on the water, or if one prefers, the regularly recurring muscular action of the arms. It may be "beer-drink-chamber-music," where the rhythm is produced by old men sitting round the walls inside a hut and beating on the ground with sticks. In fact one may say, that wherever the African hears regular percussion he instinctively translates it into song. Or conversely, that almost always, wherever there is an African song, there is also some regular and mensurable rhythm on which it is based; further it is an objective rhythm and is produced by mechanical means and is therefore able to be measured mechanically.

We have, then, abundant material for our objective recording. How can we arrange our experiments so that we shall obtain a recording which can be measured or counted arithmetically? If we are to measure the results we ought to be able to see them. Both the ear and the perceptive faculty are out of court as being subjective in character. Obviously we want a mechanical device. And as all percussion is produced by contact, we have the opportunity to use electricity, which will give us all the accuracy that we could possibly look for. There can be no doubt whatever that if the problems of African rhythms are to be solved, we must use recording machines of such a type that the results will be seen and not heard, so that we can count and measure them.

All that has been said so far is merely the formal setting down of a growing conviction. Six years ago, the writer decided that if ever Kalimba music were to be recorded accurately, it must be done by an electric machine which would write the music on paper. He tried and failed; but this conviction was not shaken. Later, a study of drumming was attempted. If the reader refers to the article on African Drumming which appeared in Bantu Studies, Vol. 8, No. 1 March, 1934, he will imagine the mental strivings and manual struggles which were necessary in order to master the examples there quoted. It was perfectly clear at the time, that any serious study of the more difficult drumming could only be done with an electric recorder which would give written results. And you will look in vain in that article for the handclapping and singing which accompany the drum examples quoted there. These were beyond the wit of man, but they are by no means beyond the capabilities of electricity. Later still, attention was turned to handclapping: the writer trained himself to be able to clap and sing more than one simple African song, but beyond this was the vast expanse of material, often obviously containing passages which were crying out for investigation, totally outside the power of the mind to learn, but surely not beyond the electric recorder if such could be devised. We proceed to the description of such a machine, which has passed its tests, and records with satisfactory precision.

3. Apparatus for Electrical Recording of Rhythms

The principle of the apparatus is that there shall be a sufficient number of pencils arranged side by side which write on a continuous paper drawn along underneath them, thus producing parallel lines. Each percussion instrument taking part in the music is connected electrically with electromagnets placed so that whenever a contact is made, the pencils are drawn away at right-angles to the line they are making, thus marking the exact moment when the percussion was made. Each percussion instrument is connected with its own pencil. The pencils must be truly aligned, so that a contact made say by the first drum and the fourth drum simultaneously, will produce bends in the lines of their respective pencils, immediately above and below each other. In reading the record, therefore, we shall know that marks which are in line with each other, were produced by simultaneous percussion on the respective instruments.

- a. Twenty metal arms of lengths varying in series from 3" to 9", are mounted side by side on a board, by nails on which each can revolve, passing through a hole drilled in each arm one third of the length from the end of each arm. The arms are one-eighth of an inch thick and are mounted at one quarter of an inch from centre to centre, thus allowing one eighth of an inch gap between each arm. The arms are kept parallel by a stop pin on one side of each, against which they are pressed by a spring pushing against the other side of each arm. The stop pins are driven into the board on which the arms are mounted.
- b. At the ends furthest away from the pivots, each arm has a small hole in which a small piece of soft "propelling pencil" lead is placed, the lead being pressed down by a spring fixed to each arm. The arms are so placed that the pencils are all in a row and exactly opposite one another. Adjustment of this alignment is provided for.
- c. Below the pencils is a rounded bar of wood over which passes a paper of sufficient width, being fed from a roll underneath, and being wound on a roller. This winding is done by hand. The paper moves at about two inches per second.
- d. At the ends of the arms nearest the pivots are inserted small pieces of malleable iron, and opposite these, mounted on the board, are electro magnets, one to each arm, so placed that if current flows through

them, they will pull the arms towards themselves a distance of just less than one-sixteenth of an inch, thus causing the pencils to move just less than one eighth of an inch. That is, the arms can be moved by their magnets without touching the adjacent arms.

- e. Each magnet is connected by a common wire to one terminal of a car battery. To the other wire from each magnet is attached a length of flexible insulated wire, at the ends of which are attached small spring brass rings which will fit conveniently tightly over the first finger.
- f. One arm with its magnet are connected with a small spring contact like a morse tapper, placed in front of the apparatus, and which is the operator's control contact.
- g. A number of petrol tins corresponding to the number of drums required are connected electrically between themselves and also with the second terminal of the car battery. The control switch is also connected with this terminal, and in the case of handclapping, where two brass rings are needed, one of these is likewise connected with this terminal of the car battery.
- h. A switch is provided in the circuit so that the current can be turned on after the music is well under way.
- i. The cost of the apparatus excluding the car battery is about thirty shillings.

The following points may be noted:-

- a. Whenever a performer makes a percussion whether of drumming or clapping, the line of this pencil will make a simultaneous deflection.
- b. In the case of drums, not only the rhythm of each drum but the beats played by each individual hand will be registered.
- c. The operator hears the resultant rhythm of the music, and taps this out on his control. This operation is not essential but it helps in the subsequent reading of the record.
 - d. The rhythm of the song is recorded in this fashion:—

The operator writes down the words of the song beforehand. He then makes marks on those syllables which he can recognise easily and quickly when the song is sung.

While the song is being sung, the operator depresses his control key every time the singer sings one of the marked syllables. While doing this, of course, he does not tap out the resultant rhythm. This process

may sound difficult but it is easy in practice. The operator does not depend on his ear: he watches the mouth of the singer. This is the only part of the experiment where the subjective element comes in, though as can be seen, that element is reduced to its minimum.

4. Procedure for Recording

A drum rhythm which has clapping and singing accompaniment is best chosen as it serves the manifold purpose of:—

discovering the rhythm of each drum (Say 4 drums);

discovering the exact relation of each drum rhythm with the others, i.e., finding the cross rhythms;

discovering the exact rhythm of the clapping. Quite often this cannot be arrived at by listening. It may be based on binary or ternary rhythm, we cannot tell;

discovering the relation of the clapping rhythm with the drums; discovering the rhythm of the song;

discovering the relations of the clapping with the song melody; discovering the relation of the song with the drumming.

In fact we are enabled to make no less than fourteen separate investigations in one operation.

- a. The operator summons a party of drummers, a boy for clapping a singer (or more) and a European assistant.
- b. The operator takes down the words of the song. The singer sings it and the operator takes down the melody, noting approximately though not with excessive care, the rhythm of it.

He makes a clear mark above the syllables which he can recognise easily and quickly. The more syllables he marks, the more accurate and incontrovertible will be the record.

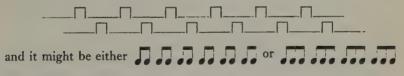
- c. The drummers are supplied with the brass rings, one for each forefinger, the rings being supplied in rotation so that the drum recordings will appear in order on the paper.
- d. The operator writes on the paper opposite each pencil, its particular function, e.g. top drum, left; middle drum, right; clap; control, etc.
- e. The clapper is supplied with two rings, one for each hand. In clapping he must clap one ring against the other.
- f. There follows a brief instruction: the players are exhorted to be careful to play firmly on the petrol tins, and also to guard against touching them except when they intend to make a beat. In passing we may say

that if several recordings are done of the same drumming, accidental contacts if any, should be apparent by comparison.

- g. A short practice is held. The Africans called by the writer found no difficulty in drumming with one finger only of each hand. In fact he was taught a drum rhythm on a table in this very way by an African.
- h. The European assistant now takes his place by the paper-roller handle.
- i. The drumming is started; the clapper claps and the singer sings. When it is going nicely, the operator gives a signal to the assistant, and switches on the current. The assistant starts winding the paper, and the operator taps out the main beats of the resultant rhythm. After about 4 seconds the current is switched off, the assistant winds up some paper so as to leave a blank gap, the current goes on again and the operator, watching the mouth of the singer, this time taps out the marked syllables of the song. About four seconds later the current is switched off and the recording is complete.

In less than ten seconds of actual recording, we have made an almost perfect and indisputable record of no less than fourteen different investigations.

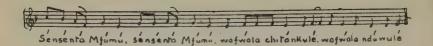
j. Each drummer is now asked in turn and separately, to beat his rhythm by himself. The operator notes any salient features about it that strike him. These notes are not essential except in a case of a rhythmic pattern in which a drum beat occurs on each beat of the bar. In which case it will be recorded thus:—



5. Deciphering the Record

In Appendix 1 there is an example of recording made on November 1st, 1936, of a Bemba dance drumming with handclap and song. The name of the drumming is Ngwayi, or rather "Ngwayi, new style," as the boys have it. It was this same Ngwayi which was analysed in the article on African Drumming referred to above. It will be interesting to find how it justifies the name of "Ngwayi, new style."

We give first the words of the song, with the syllables marked for tapping, together with the tune as it was noted down before recording.



Our concern here so far as music goes, is with the melody, and not the rhythm of the melody. All we want is the notes which are sung to each syllable: we remember that this investigation is to do with rhythm, and not primarily with melody, and therefore we do not object to the subjective method used in transcribing the melody.

Looking at Appendix one, we note the marks on the control line for giving the main beats of the resultant rhythm. This line is of course purely subjective, being the operator's impression as to what the main beats were. But that does not matter a bit. Its only use is to give us a convenient indication as to where the rhythms start to repeat again. Noting that the Kabitiko drum is beating regularly, twelve beats to the bar as marked by the control, we number the beats accordingly, choosing the beat which is two beats behind the first clap as Beat 1.

Looking at the Kabitiko line we see that we may write it down as a line of quavers (or any other note-value). Is it binary or ternary? Here we consult our notes (see section 4 note j) and find it is ternary with strong beats as follows:—

It is interesting to compare this with the rhythm of this drum as analysed in "African Drumming." There it was given as:—

So in the "new style," the Kabitiko drum has filled out its rhythmic pattern, rather a pity, we think, as the original was so distinctive in comparison with the other drums.

Between the recorded lines of the Kabitiko drum we write in convenient signs to makes the rhythm clear, and also to show whether right or left hand were used. We choose to write | for Right, and . for Left.

We turn our attention to the Sensele drum. Now the young gentleman who played this drum was in our presence firmly exhorted by the Kabitiko player, with quite a lot of illustration, that he was to play this rhythm:—

which you will perceive, is identical with the rhythm for this drum given in "African Drumming." But what do we find on the record? We mark in the signs to make the rhythm clear, and we find it is unmistakeably this:—

When the young rascal was faced with this disclosure (which could never have been detected by ear), he merely said, "But that is what I was taught when I originally learnt to play the Sensele part for this dance." So here we have an authentic variant, and incidentally quite an unlooked-for discovery. But the evidence of the pencil line cannot be contradicted. And if any confirmation of it were needed, it lies in the fact that he freely admitted to having played this rhythm.

Further, on the same afternoon, a little later, he suddenly started another variant. Space prevents us from giving the recorder marks, but the rhythm was this:—

Altogether then, we have three variants for the Sensele drum. This is characteristic of African drumming. Provided the drums move generally within the limits of their main rhythm, they can make embellishments or variations at will. At least that is our impression, but we want more evidence before we state it as a fact.

We look now at the Kabanga drum; marking in its rhythm we find that it plays eight quavers followed by a minim, or vice versa, it matters not. This looks binary, but on referring to our notes, we find the stress marks proclaimed it as ternary, and it should therefore be written thus:

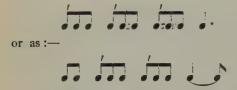
Objection may be taken to the evidence of the notes which we refer to. Here is a loop-hole for error which we admit. Though with only one drum to listen to, we ought to be able to tell, if it is at all regular, whether it is beating a binary or ternary rhythm. But the objection remains and we could meet it by placing on the drum a small insulated metal plate

connected to a circuit of its own. We could ask the drummer to beat his stressed beats on this plate and the others on the petrol tin. At the time of writing we have not had time to do this.

The Kabanga drum in places has a slight variation. He plays:-



There is also another variation on strip B. The recording might be written either as:—



We had to summon a drummer to our aid. Both rhythms were tapped out to him and he had no hesitation in accepting the second. There was no question about it. Here again is an illustration of the point already to, namely, that variation seems to be permitted so long as it conforms to the general rhythmic pattern of the original. The rejected rhythm while covering the same number of beats, has no longer the "flavour" of the other two variants. By comparing the three we note that this "flavour" is produced by the entry of the figure on the second pulse of the group of three pulses, with, therefore, an implied rest on the first (and strong) pulse. If the reader beats out these two rhythmic patterns for himself, he will find what a big difference there is between these two rhythms.

The Itumba drum rhythms as transcribed in Appendix 2 do not appear in Appendix 1. The reason is that at the time of recording the writer did not know that a fourth drum should be playing: and anyway, the paper at his disposal was only just wide enough to record the other instruments. He therefore obtained the correct placing of the Itumba drum by causing it to be played subsequently in conjunction with one or other of the others. The Itumba drum has two very distinct and different rhythmic figures. This is notable, for the variations in the other drums in each case have a basic structure which remains unchanged. Great freedom is apparently allowed to the Itumba player. This is the writer's impression by observation. There is not yet enough evidence to lay it down as proven fact. One of the Itumba rhythms has a variant, making three variants in all. The rhythms are:—

The clapping rhythm is plain. It is a double clap followed by a pause, a double clap followed by a pause.

Lastly we review the song. First we write in our marked syllables under the control marks to which they belong. We then fill in the other syllables. At once we notice a curious feature. Whereas in the first singing, the song is introduced so that the word mfu-mu coincides with the clap, in the second singing, the song is shifted forward so that the clap occurs on se-nse-nta. Looking at the numbers of the beats, we see that while the first time, the song began on beat 9, the second time it begins on beat 3, i.e. 6 beats early, and as the complete measure consists of 12 beats, that means that while in one case it begins (to put it conveniently) as the beginning, in the second case it starts in the middle. Several recordings were made, and in each case the song was sung in this odd fashion. Why? We have found out the fact, but we know not the reason. But we never even suspected the fact itself before the electric recording was made.

The music of Se-nse-nta has four notes to be accounted for. Looking at the recording, we find that while Se undoubtedly coincides with beat 9,1 Nse just as clearly does not coincide with beat 10. In fact it falls half way between beats 10 and 11. Nta coincides with beat 12, and mfufalls on beat 3 of the next bar. But Nta has two notes to it. We have then:—

There is no doubt about it. It is 2 against 3. Four notes of music against six of the drums. The syllables we marked are found to occur in the correct position for this rhythm. Surely we may presume that the fourth note marked x falls halfway between 1 and 2. Additional evidence for this is the fact that when we roughed out the melody we gave these

¹ The first entry of se-nse-nta on strip B was tapped a trifle late. Compare the next bar: the strips record many entries of se-nse-nta, as stated above, on beat 9.

four notes equal value. But it is just these four notes which are interesting. In our rough transcription, we were not sure what exactly was their rhythm. The recorder tells us. We did not mark them 2 against 3, but the record shows this to be the case. The objective method shows its superiority.

We have now reviewed each part separately. We go on to view the record vertically so as to find the relation of the instruments, clapping and singing with each other.

First the drums. Four strips of recording were made and for reference have been lettered A, B, C, and D. It is impossible to reproduce them in their entirety. The strips are lodged with the University of the Witwatersrand. A specimen of the recording is given in Appendix 1.

The order in which the drums are considered is the order in which they are regarded by the Bemba people. from the top drum to the lowest the order being Sensele, Kabitiko, Kabanga and Itumba. The first three may be of equal size and are of the familiar shape like a woman's pounding mortar. They are about 2 feet 6ins. high, open at the lower end, with a thick skin stretched over the top and held down by wooden pegs driven through the skin into the side of the drum. The Itumba is a special drum, about 1 ft. 3 ins. high and 1 ft. in diameter. It is open at the bottom and has a thin skin stretched over the top, studded with little "knobbles" of Native rubber. In the side is a hole about 1 inch in diameter over which is stuck a piece of that opaque covering to a certain spider's eggs which the writer knows as "Lemba-lemba." This drum is always used as an embellishment and is played only by superior players who use many variations in playing. It produces a very low and persistent humming sound.

Reference should be made frequently, in following the analysis given below, to Appendices 1 and 2.

First we note that in the case of each drum, after 12 pulses, the rhythmic figure is repeated. Thus the whole piece is in the form of a 12 pulse measure. Further, the main rhythm of each drum is ternary—groups of three. We thus consider the bar to consist of four groups of three.

For purposes of analysis we must choose a starting point from which to count. It does not matter where. Let us therefore call the main beat of Sensele which occurs just before the first clap, as Beat 1.

The Sensele drum therefore has its main beats on 1, 4, 7, 10. From strips A. B, C, and D, we find that the Kabitiko drum enters with a strong

beat on 5, and his main beats are 5, 8, 11, 2. Comparing the relation of the two rhythms thus:—

we see that there is a cross rhythm here. Kabitiko's main beats are one beat later than those of Sensele. The relation of their rhythmic figures is therefore:—

This relation holds good also for the variations of both Sensele and Kabitiko. Whatever the variation, the same cross rhythm occurs.

From strips A and B we find that the Kabanga drum starts with two unaccented beats, and then his first main beat occurs on beat 7 of the bar. His main beats are therefore 7, 10, 1, or 7, 10, 1, 3, in the variant. Thus the Kabanga stressed beats coincide with those of Sensele with the interesting exception of the stressed 3 in the variant. Main beats on 1 and 3, with the entry of the figure on 5 (1, 3, 5,) indicate a binary touch in the middle of a strongly ternary rhythm. This is one of the little ways in which African drumming is made so thrilling and delightful. Across the main ternary rhythm come a few beats,—just a touch—of binary rhythm played perhaps by only one drum: but quite sufficient to give piquance to the movement. However, as the main beats of Sensele and Kabanga coincide, we see that they are "brothers."

The Itumba drum has two distinctive variations. Strip C shows that one of these starts on beat 10 1/2 with the first main beat on 11, its main beats being 11, 2, 5, 8. The other variation, also on strip C has its first main beat on 5, its stresses being either 5, 8, 11, 1, 3, or if we take the variant of this, 5, 8, 11, (1), 2. Note that the start on 11 in the one case and 5 in the other, simply means that one variation starts exactly half a measure (6 beats) away from the other. We note also that the Itumba repeats the Kabanga's device of a binary interruption in the ternary flow, this interruption occurring on beats 1, 3, and the following 5. But Itumba does not always do this (nor does Kabanga). Itumba's variation 5, 8, 11, 1, 2, coincides with Kabitiko's figure:—

Once more it is clear that the main ternary rhythm can be crossed from time to time, and at the whim of the player, by a momentary binary rhythm, which is thrilling to listen to. It is certain the African enjoys this, for he hammers out these binary beats truly and well. To return to the Itumba, whatever variation is taken, the Itumba and the Kabitiko carry the same main beats. Therefore these, the second and fourth drums, are "brothers."

We see then that the rhythm of Sensele and Kabanga crosses that of Kabitiko and Itumba. And each of these pairs has the same starting point for its first main beat. For Sensele's starting point can be reckoned as either 1, 4, 7, or 10, and 7 is Kabanga's starting point; while both Kabitiko and Itumba enter on beat 5.

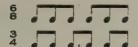
Turning our attention to the Clap, we find its rhythm, which is:—clap clap (long pause) clap clap (long pause) clap clap, etc. falls on beats 3 and 6. All strips A, B, C, and D witness to the invariable nature of the clap. Now no drum has a single stress on 6, and only two have one on 3, and that only when they are departing from their main rhythm to make the binary interlude. So the clap rhythm is crossing all four drums. Our best drummer says that when he is drumming, he is aware that the clapper is clapping just after the main beat of Kabitiko, which statement agrees with our analysis.

Incidentally, we expect no sort of help from the African with the analysis of cross rhythms. He knows his own drum and how to incorporate it into the whole ensemble, but he has no analytical sense whatever. He cannot say what is happening. This is another reason why mechanical recording is essential.

Another interesting fact about the entry of the clap is this. The first clap of each clap group comes in on the beat following the only beat in the measure where there are less than three drums beating simultaneously. Whatever variation is played, it will be found that only two drums are beating on beat 2 in each bar. And the clap enters on beat 3. Whether this fact guides the clapper, we cannot say. He may be listening for this weak beat; on the other hand beat 3 is the beat following the final strong beat of the Kabitiko rhythmic figure. Were he listening to this figure, which is distinctive, it would be easy for him to come in at the right moment.

Lastly we consider the relation of the song with the clap and drums. From strips B. C, and D, we find it consists of 4 complete bars—48 beats, in triple time except for the touches of binary rhythm at the words "Sensenta." Here again we note with interest the inclusion of a binary touch in a ternary form. From these strips we find that the song may enter on either beat 9 or beat 3. On strips B and C it enters alternately on 9 and 3. On strip D it enters each time on 9. But in either case, its main beats are 3, 6, 9, 12, and we see at once that the song is the "brother" of the handclap.

There is another point of special interest. Kabitiko and Itumba have a binary interruption on beats 1, 3 and 5, while the song's binary rhythm occurs on either on 9, $10\frac{1}{2}$, 12, $1\frac{1}{2}$ 3 or on 3, $4\frac{1}{2}$, 6, $7\frac{1}{2}$, 9, according to its starting point. Thus the binary rhythm of Kabitiko and Itumba has nothing whatever to do with the binary part of the song. But what we do notice particularly is this; the binary effect of the song is produced in a different way from that of the drums. With the drums it is a case of 6/8 time being changed to 3/4.



While with the song, it is a case of _ = . or " 2 against 3."



It is strange that the untutored African should perform by the light of nature these two rhythmic devices—without of course having the least idea of the principle underlying what he is doing.

We have now made the fourteen investigations which we claimed could be made simultaneously on the electric recorder, though in our case we admit that by oversight, we had to make two operations instead of one. We now know the separate rhythms of four drums; the hands used by each drummer in playing; the relation of the drum rhythms with each other; the rhythm of the clapping; the relation of the clapping with the drums; the rhythm of the song; the relation of the clapping with the song; the relation of the song with the clapping. There remains one big and all-important query. Will these revelations lead us to discover the basic principle on which this delightful Ngwayi dance music is built.

To this end, we proceed to summarise the results of the analysis we have made.

1. Summary of Rhythms

(The letters at the left of the rhythms refer to the recording strip on which those rhythms appear.)

Entry on Main beats beat

Sensele

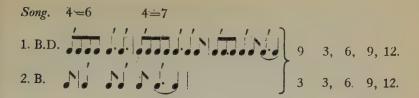
Kabitiko

Kabanga

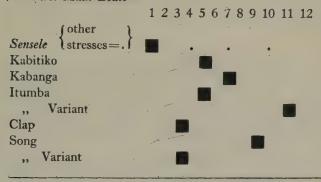
Itumba

Clap

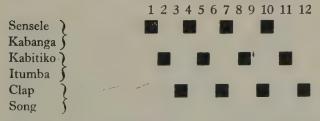
3 3, 6.



2. First Main Beats



3. Main Beats of Voices, Showing Cross Rhythms



From these summaries it is tempting to draw general pricriples. We want a great deal more evidence from the recording of other dance music before accepting generalisatins. However, as far as the piece under review goes, we put forward the three following conclusions:—

From Summary 1 we conclude

"Freedom of variation but restriction of form."

The variation tends to have the same rhythmic feeling of form as the original. (But note the exception of the Itumba alternative). The discussion of the third Kabanga alternative on p. 9 is strong evidence for this conclusion. It would be easier to play the rejected form, but it was rejected doubtless just because it had a different rhythmic feeling. It does not sound a bit the same; not a bit.

The conclusion to be drawn from Summaries 2 and 3 together is:

"Independence of entry but interdependence of rhythm."

Summary 3 is significant. It is the climax of our investigation. Surely it shows the inner principle of the rhythmic construction of *Ngwayi*. The principle may be stated thus:—

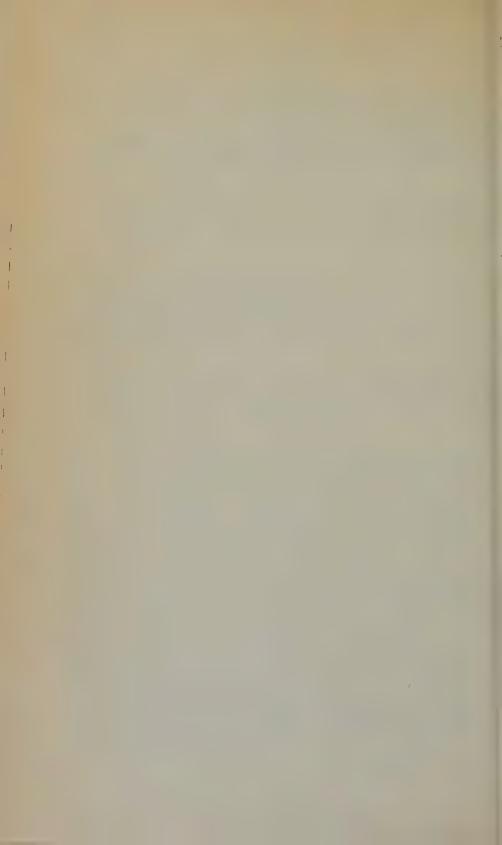
"This piece consists of ternary units of three pulses. The parts are so disposed that all three pulses are used as main beats, thus creating three cross rhythms. There are four ternary units to a measure."

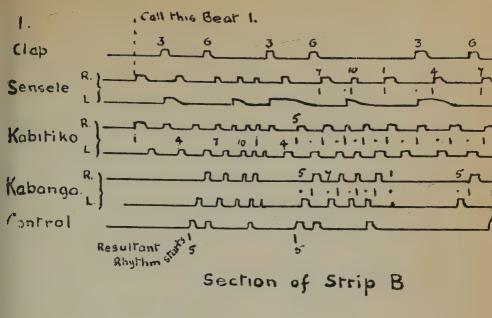
This essay starts with a critical examination of present methods of recording African rhythms. It pleads for scientific mechanical recording providing mensurable results. It proceeds to apply this method: we hope the result justifies the plea. The writer can at least claim of Appendix 2, not that he *thinks* it is right, but that he *knows* it is right.

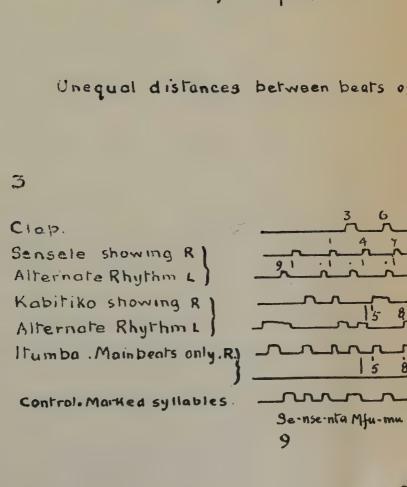
. The writer suggested that this discussion on recording rhythms might give the reader some idea of the features and principles of African rhythms in music as found in Northern Rhodesia. He hopes that the essay has fulfilled its purpose in this respect also.

Lastly he would ask the reader to recollect that he has been studying what can only be described as a perfect art form. It is as perfect in its way as the polyphony of Palestrina: indeed it is analogous in form. It is as perfect as the harmony of the later masters. Here indeed is harmony, but it is rhythmic harmony. It is the harmony of the drums and claps. They are music to the African-and music too, to the European who has ears to hear. In rhythmic beauty and interest it is as far removed from Western music as manhood is from infancy. Ngwayi is but one of countless African Dance rhythms. It was not chosen for study because it was the best of its type. And let the reader recollect that he has been studying the African counterpart of European Music for Full Orchestra and Chorus. But it has this to its crown. It is of the people, for the people and by the people. It needs no highly trained performer. Four drums and an untutored village crowd can produce at any moment without rehearsal music that rivals in intensity of interest that of our own masters. And if Bach's music or Beethoven's is divine, the heathen African's dance measures can claim no less a source of inspiration. The writer of Laudate Domimun could hardly have expressed in better words than these, either the universality of genius, or the divine nature of all beautiful things:-

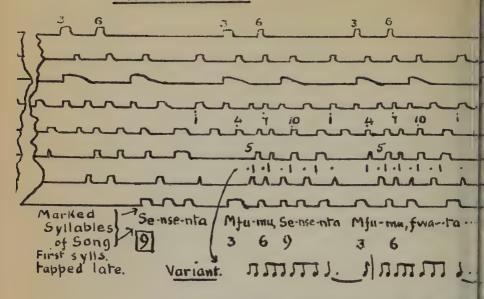
Praise Him in the cymbals and dances:
Praise Him upon the strings and pipe.
Praise Him upon the well-tuned cymbals:
Praise Him upon the loud cymbals.
Let everything that hath breath—simple African or cultured
Western—praise the Lord.





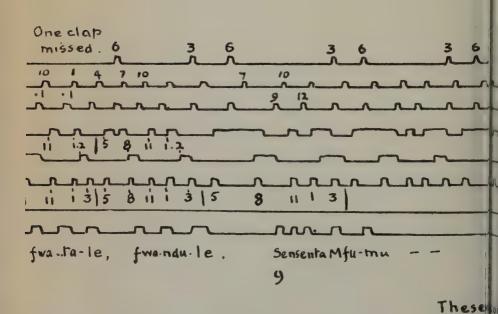


APPENDIX I.

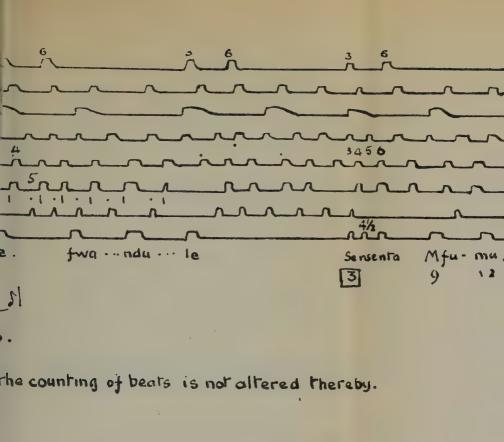


Another Section of Strip

f same time-value shows irregular turning of roll



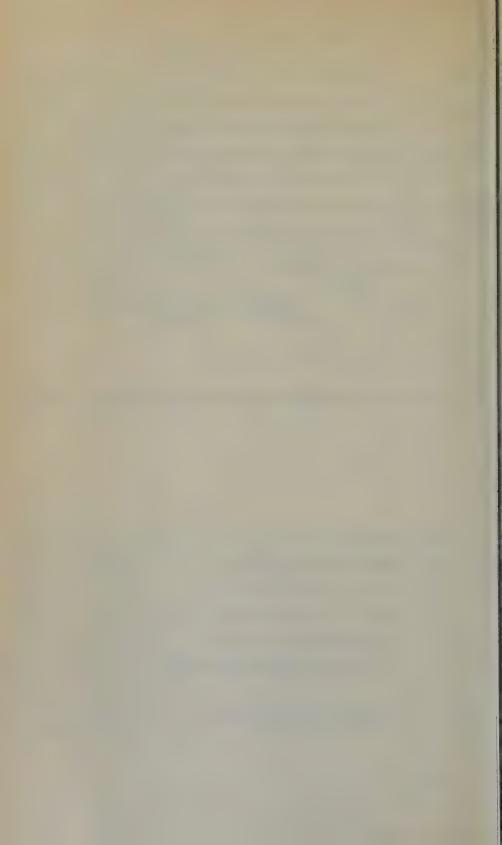
rection of Strip D.



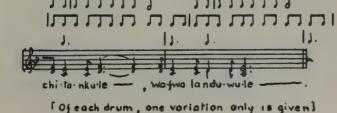
ر مرا. ا. ا. ا الما.

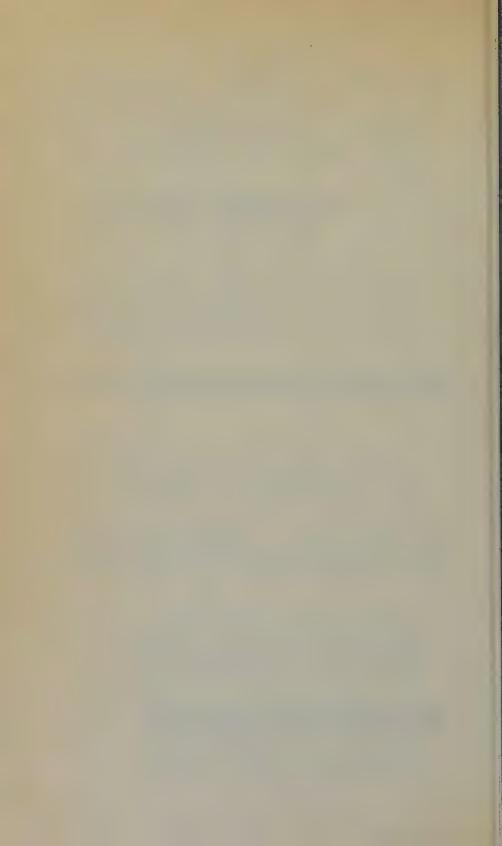
1212

original.









TRADITIONAL ORIGINS AND TRIBAL RELATIONSHIPS OF THE SOTHO OF THE NORTHERN TRANSVAAL

By J. D. KRIGE

INTRODUCTION

The traditions¹ upon which the following account is based were collected² in the course of a two months' tour³ in the area indicated by the accompanying map. Apart from the Ndebele south of Pietersberg and the practically uninhabited country to the west of the Maxalakwena River, the area includes the whole of the northern Transvaal to the west of the Game Reserve. It is divided more or less equally south of the Zoutpansberg mountains into highveld and lowveld. It's most marked physical feature is the great mass of the Drakensberg range, towering above the Olifants (Lepelle) River where the latter breaks through the mountains north of Ohrigstad. One gigantic limb stretches northwest to form the dividing escarpment which gradually merges into the Zoutpansberg mountains, the fastnesses of Venda seclusion and secretiveness. The Drakensberg mountains and their foothills in the lowveld have been

¹ The material of our account is obtained exclusively from existing traditions, our additions being merely the attempt at dating and the speculation as to interrelations. The dates given must be regarded as only approximate, and those before 1830 as little more than conjectural, based as they are upon genealogies, migrations and events of no exactly determinable chronology. Again, the traditions obtained were those only of the ruling group in each tribe, which must necessarily be fragmentary in respect of the other constituent groups, and often biassed. Nevertheless there is, as between the traditions of the various tribes, such remarkable agreement at least in broad outline, that one may assume a reasonable degree of reliability. Much more intensive work, supplemented by comparisons over an extensive area, is necessary; but we venture to present the traditions obtained not merely as a record of what is at present remembered by the oldest man, but also as a basis for, and incentive to, more fieldwork.

² The information was obtained from the chiefs of the 26 tribes visited. They were usually assisted by several old men, specially collected for the purpose, and sometimes by a whole tribal gathering (pitšo). The primary purpose was not the investigation of history, but the study of the general setting and cultural affinities of the Lobedu, among whom we have been doing field work for about nine months.

June and July, 1937. This tour was part of an investigation made under a Fellowship granted to my wife and me by the International Institute of African Languages and Cultures. Spending as we did about two days in each of the 26 tribes visited, we could do little more than concentrate upon those aspects of culture and acculturation which promised to be of value in estimating relationships and contacts of the Lobedu.

equally important for the development of the Lobedu culture complex and as a refuge to many other Sotho tribes during the disturbances of the second quarter of the nineteenth century. To the far northwest rise, above the surrounding bushveld, the isolated Blaauwberg, renowned stronghold of Mmalebôxô's Xananwa who for long defied the Boers from their precipitous ridges. The east of the area, bounded by the present Game Reserve, was once an extensive tsetse-fly belt and still is unhealthy malaria country. It was dreaded by cattle-owning peoples and traversed only in case of dire necessity. For two centuries Sotho and Venda to the west were isolated by this formidable barrier from the Tonga. They were also shut off from the north and west by the extension of the tsetse belt along the great enveloping curve of the Limpopo.

This area is at present occupied by three main groups of tribes: (a) The Venda concentrated in the Zoutpansberg mountains but extending like an irregular crescent southwards. The indentation of their boundaries from the direction of Pietersburg apparently represents the northward thrust of the highveld Sotho tribes. (b) The Tonga coming from the east in the last hundred years. They have driven a wedge, cutting deep into the mountain slopes, between the Olifants and Luvuvhu rivers, and have thus arrested extensive interpenetration of Sotho and Venda in the lowveld. (c) The Sotho who might conveniently be divided into highveld and lowveld tribes. The present highveld tribes are on the whole comparatively recent immigrants-cold, bleak and unwooded, the highveld would not be readily acceptable to Sotho predelictions except under pressure. It is mostly in the lowveld that one discovers references in tradition to an original population, now completely ousted or overlain by the present ruling tribes, for most of whom we have to postulate immigration prior to 1700.1 Whatever the nature and distribution of the original population, there is little doubt that several old Sotho tribes have become wholly Vendaised, while some outposts of the Venda have, especially in the lowveld, in turn been Sothoised by the newer Sotho immigrants who superimposed themselves on the aborigines. The problem of working

¹ All the highveld tribes appear to have arrived after 1700, with the exception of the kolobê of Mmamabolo. But their first settlement was on the slopes of the escarpment rather than on the highveld. The Koni of Matala arrived just after the turn of the century (c. 1730), and just after them came the Tôkwa and Moletše. The Xananwa came about a century later. The Birwa, though partly on the highveld, belong rather to the lowveld culture area and arrived c. 1800. The highveld is by no means so characteristic and well-defined a culture area as the lowveld; there is nothing like the predominance of the Lobedu among the lowveld Sotho, the highveld tribes acknowledging no pre-ëminence among themselves. For a time they were dominated by the Pedi, and geographically their area is open to contacts southwards whence most of them came.

out the movements and chronology of immigration of the Sotho is indeed a formidable one. Our attempt is merely to throw into relief some orgins and tribal relationships as far as they are recorded in existing tradition.¹

THE VENDA

For the slight reconstruction2 required for our purposes, we need merely emphasise the northern origin of the Venda, the absorption by them of some Sotho tribes and the ascendancy of the Sotho over, sometimes amounting to complete absorption of, some Venda outposts in the south. The origin of the Venda is, except for some groups, placed according to tradition north of the Limpopo. Those who trace their ancestry to Thoho-ya-ndou, the predominent group, speak of Dzata, a place of settlement in Bokhalaka (Rhodesia), but their precursors, the Vhatavhatsinde composed largely of kwevho and ndou,3 have no tradition of their early history prior to crossing the Limpopo. The differences between these two main groups have been all but obliterated; moreover many other immigrant peoples, some of considerable numerical strength and widely different origin, have been assimilated. This consolidation into a single homogeneous culture complex was facilitated no doubt by favourable environmental conditions such as isolation and limited space. But it has other significance when one considers its completeness in respect of such peoples as those of Mphafuli, Tshivhulane and Lwamondo. Mphafuli was, according to tradition, always an independent chief and often in conflict with Tshivhase; of southern, perhaps Nguni origin, he attached himself to the Venda according to one account before, according to another after, their migration from the north. Tshivhulane, chief of the furthest south-eastern Venda, 4 considers that his tribe, together with his relatives, Masia (the senior line), Tshimbupfe, Komvanye and NeTsianda, were descendants of Mukhovhe who came from Bolaudzi, in the south-east near Pilgrims Rest where the Pai and Pulana were their neighbours. The Phalaborwa have no remembrance of the passage of these or other Venda

¹ The experience of our tour indicates how dangerous it would have been not only to reconstruct history but also to interpret culture if we had confined our investigation to a single tribe. The functionalist needs the perspective and suggestiveness of historical and extended investigation.

We were concerned with the *Venda* only to clear up certain relationships, historical and cultural, with the *Lobedu* and consequently visited only a few areas which we thought might be significant. These were *Tswale* and *Moila*, the two outliers in the south; *Tshivhulane* as representative of the *Laudzi* group; *Tshivhase*, the present stronghold of the purest *Venda*; and the area round about *Khalavha* and *Lake Fundudzi*.

These are mitupo (clan names). Kwevho = dove; ndou = elephant.

⁴ They distinguish themselves as tshironga-speaking Venda, in contrast to tshiilafuri (western) and tshipani (eastern) speaking Venda.

-though they know the Koni from Bolaodi1-but Mohokoni who came from the Game Reserve confirms the southern origin of Tshivhulane, placing it, however, near Sautene, a little north of where the Letaba River strikes the northern boundary of the Phalaborwa. Mukhovhe is said to have arrived at Louis Moore when the Venda of Ramapulana² had already settled in the Zoutpansberg, and it was from Louis Moore that the various sections, already mentioned, of these tshironga-speaking Venda dispersed. Mukhovhe, according to Tshivhulane, was Venda not Sotho; though complete as has been the absorption of his descendants into the Venda culture complex, it is likely that he, like Lwamondo, comes of Sotho, probably Koni stock.3 Lwamondo also traces his origin to Bolaudzi, but avers that he had already settled in the country when the Venda arrived. It is remarkable that these Venda have lost all knowledge of the nature of their ancestry, and that, while there is no record of them among long established Sotho tribes in the presumed direct line of migration, both the Narene and the Koni, who also say they come from Bolaodi, have traditions of sections of their people leaving for Vendaland.

The distance and volume of the Venda diffusion southwards is also of importance in the interpretation of the Sotho culture complex in the northern Transvaal. In the lowveld there are today two Sothoised Venda tribes, the Kwebo of Tswale and Moila; both still acknowledge their Venda ancestry, tracing their origin to Thoho-ya-ndou; but both have forgotten Dzata, the ancestral home, and both are Sotho-speaking. Both deny all kinship with the Lobedu, with whom they have the closest cultural and political, as well as linguistic, relationships. While the Tonga invasion, which started a century ago, separated them, and accelerated their divergence, from the main Venda body, the lapse of a few generations is insufficient to account for the complete loss of their original language and their assimilation to the culture of the Lobedu. They presumably represent an outlier from the Venda, separating from

¹ Bolaodi is the Sotho of the Venda Bolaudzi. It is a name of more than ordinary interest among the northern Sotho and the Venda. Its location is very generally placed near Pilgrims Rest, or at least far to the south-east. We have heard it confused with the place of origin of the Lobedu by a Birwa chief (Makxatho) who knows the Lobedu well, perhaps because the Lobedu have the praise baLozwi.

² Ramapulana is always mentioned by the Sotho people in the south as the great Venda chief. He represents the senior line of descent from the great legendary hero Thoho-ya-ndou. His descendant today is chief Mphefu.

³ Tshivhulane denies all relationship with the Koni.

⁴Tswale goes to Modjadji, queen of the main Lobedu section, Moila to Mmamaila, chief of a branch of the Lobedu, in order to loba (ask) for rain, a service for which they hand over one of their daughters as wives to these Lobedu chiefs.

their kin about two centuries ago and overwhelmed by the powerful Lobedu culture complex to which they offered small resistance. Their receptivity to Lobedu influences is but an index of intimate and age-long relationships between Venda and Lobedu. The Lobedu, like the Vhatavhatsinde, are composed largely of kwebo and dou. Dou is the totem of at least one important group, the baRabothatha, of the Lobedu, who are said to have been badzeta (messengers) during the migration southwards and have always been responsible for making the sacred Komana drums. Like the Venda, the Lobedu have traditions referring to their association with the Nyai and the Lozwi, with the latter of whom the Lobedu definitely, the Venda doubtfully, identify themselves. The Venda in the south, near Spelonken, remember, though faintly, Mambo, chief of the Karanga: the Lobedu say that Monomotapa ruled the Karanga (or Khalaka), that his sons called themselves Mambo's and that the Lobedu originated from one of the Mambo's who settled near a mountain Maulwi in Bokhalaka. Among the Lobedu there are certain ruins, feared and avoided today, which are ascribed to the Ngona, but whereas these Ngona were the aborigines and still survive in Vendaland, these are none left in Bolobedu, no association with them is recorded and not they, but the Kheôka, were the original inhabitants.2 These traditional coincidences, coupled with many similarities in language, point to important links in the past. But the most strikingly characteristic features of the Lobedu culture complex—the rain cult, the divinity of the queen and her ritual suicide, the machinery of succession to the throne, the system of "mothers" in the legal organisation—are absent among the Venda.3 These are not innovations borrowed from some neighbouring tribe; on the contrary many tribes have attempted, not always with success, to imitate them. We have good reason to regard them as old and belonging to a pattern found north of the Limpopo, in which case, if Lobedu and Venda have the same origin in the north, they should be more in evidence in the comparative isolation of the Zoutpansberg than among the Lobedu with their tremendous mixture of tribes. Further, the denial of kinship between Venda and Lobedu is not to be taken lightly when, judging by the physical features of the people, one must also infer a far greater admixture of Arab or Hamitic

¹ But it is no longer usual to hear the term baKwebo applied to the Lobedu, probably as some old men suggest because the Sotho verb, ho kweba, means the process of elongating the labia minora, a practice enjoined by custom but concerning which an uneasy consciousness is developing, probably because of the Christian taboo of sex.

² The Vha ha Tshivhulane have a similar tradition of the Ngona, who are said to have fled to Tôkwa country.

³ Venda culture again is characterised by the absence of circumcision (except in recent times), the domba and thondo forms of tribal initiation and a form of divination by ndilo. These are not Lobedu culture features.

(light) blood among the Lobedu. The evidence seems to suggest close affinities, though not identity of ancestry, between the Lobedu and the vanguard of the Venda. Perhaps they were both part of the Monomotapa empire before they migrated southward about three centuries ago. One must not leave out of account the long and profound influence of the Venda towards the south, exercised as it was at first by a comparatively compact tribe over scattered, disunited Sotho groups, an influence which suffered its most serious setback only since the intrusion of the Tonga wedge. Within living memory numerous Venda words have disappeared from the vocabulary of Khelobedu.

On the highveld the Venda held outposts as far south as Mmamabolo's country, though there their isolated colonies have been swamped. The traditions of several other highveld tribes refer to Venda people who were driven out by them. In Dikxale's territory they were sufficiently numerous to have retained their identity and are considered the original owners, being as such still accorded certain privileges. According to Venda accounts, their expansion southward was considerably further on the highveld towards Pietersburg than into the lowveld or along the slopes of the escarpment. The explanation of the present, rather reverse, aspect of their extension southwards lies probably less in geographical factors than in the retardation of their progress in the lowveld owing to the quiet growth of the Lobedu, who unostentatiously started absorbing Venda outliers long before the Tonga invasion. On the highveld one gets the impression of expulsion rather than absorption of the Venda by more aggressive and less accommodating tribes that migrated in considerable numbers. Such were the Tôkwa and the Moletše who began a process which was accelerated by the subsequent raids of the maTêbêlê and the Pedi. Their penetration has perceptibly influenced the western Venda; even among the southern Venda (excluding Tswale and Moila), where Tonga influences are now most obvious, the Tôkwa rather than the Lobedu have made themselves felt. Although the Venda west and northwest of Luonde mountain (Piesang Kop) are always mentioned outside of Vendaland as the great Venda group and claim to be the Venda proper, it is the eastern Venda that are purest. The southern Venda are very mixed: in the east the Tonga, in the south the Sotho preponderate, the Venda being in the majority only in the triangle between the lines of the escarpment, of Venda extension and of the Tonga penetration. From the point of view of historical and cultural interrelations, these southern Venda, including the Tswale and the Moila and the descendants of the Laudzi group, are worthy of much more intensive investigation. Here one might find evidence not merely of the process of consolidation into

one people of *Venda*, aboriginal *Sotho* from that mysterious area near Swaziland and *Koni Sotho* when they still might have been *Nguni*, but also their subsequent diversification first by the gradual infiltration of the *Lobedu*, recently accelerated by the wholesale immigration of *Mmamaila's* people, then by the penetration of the *Tôkwa* with their far-south cultural affinities, and finally by the less acceptable but more enterprising *Tonga*.

THE COMPLEXITY OF THE SOTHO

The Sotho of the northern Transvaal are an enormously complex group of tribes. Very diverse as to ancestry, and lacking the homogeneity of the Venda, they are divided into numerous small independent tribes, which unlike the Venda usually have distinctive names. Each tribe consists of individuals of widely different ancestry, indicated by the tribal origin or foreign totem of the individual. These individuals make up various constituent groups1 which are attached to the nuclear ruling group, from which the tribe often takes its name and identity but which is usually greatly outnumbered by the other constituent groups except perhaps in the district of the chief. The nuclear ruling group is often divided into clans which are all of the same totem² besides having associated with it from the earliest times groups of people of different (but not originally foreign) totems.3 It is necessary to emphasise that the little we know of these tribes is limited to the nuclear ruling groups. Of the constituent groups of foreign origin within the tribe, there is often no history at all. Sometimes accretions to the tribe readily assignable to such well-known tribes as the Kxatla, Venda, Tôkwa or Lobedu can be identified; only occasionally can we be sure of the identity or even affinities of the aboriginal inhabitants which the ruling nuclear group has ousted or subjected; so that there remains a large proportion of constituent groups in the tribe of which the ancestry is obscure, if not completely lost in oblivion. This complexity and confusion everywhere appear to antedate the migrations of the nineteenth century, which have made their contribution to the inextricable tangle and to the difficulty of reconstructing historical interrelations. Even the names by which constituent groups distinguish themselves are, as a means of identification, very unreliable criteria. A man might designate his group or clan or ancestry

¹ These groups are not to be confused with the clans and lineages into which the descendants of the ruling house are divided. They are accretions from outside and are usually scattered all over the country of residence.

² For example the Lobedu are the ruling group in Bolobedu. They are divided into ba Modjadji, ba Mahasha and the bu Modika, clans which all have kolobê (pig) as totem.

Thus the dou of Rabathatha, who have been associated with the Lobedu from the earliest times, are regarded differently from say the foreign dou of Thôbôlô, more recent immigrants.

or tribe (neither he nor the investigator is always sure which) sometimes by a totem, sometimes a chief or dynasty, sometimes a place or other name, or a combination of these. But tradition records several unaccountable or arbitrary changes of totem, adoptions of the totem of another tribe or group or additions to existing totems with subsequent loss of some, so that two individuals of the same ancestry might identify themselves by entirely different totemic names. Similar changes and confusions occur in respect of the other designating names, which one might be tempted to use for identification.

An illustration might perhaps convey some idea of the prevailing complexity. We shall consider a small area of about five square miles in Bolobedu, which we have submitted to a thorough investigation. In this area there are individuals belonging to the totem dou; but attached to this distinguishing name there are at least fifteen different secondary names. The dou of Mašišimale, of Šai, of Tsupye, and of Lepye, though not recognised locally as similar or identical, we might almost certainly group together as of the same ancestry, perhaps tribal, perhaps residential. because the dou of Mašišimale (a dynastic name of the ruling nuclear group in another tribe) call themselves ba Sai or ba Tsupye, while Bolepye is the name of a place quite near to and associated with these people. Different from one another and from the aforementioned dou, probably are those individuals who call themselves dou of Khalaka (Rhodesia), of Dzêta (Vendaland), of Têbêlêne (country of the Ndebele, south of Pietersburg), of Rabothatha (ancient headman of the Lobedu), of Khata (i.e. Kxatla, also called dou khenelo kha baborwa), and of Makxoba (a tribe in Magoba's Kloof). But there are also people who describe themselves as dou of Motokotse and of Mmamotsape (unidentifiable names), of Khaha and of Maupa (both Koni chiefs), and of Mathšêtê and Selôwa (who came from Thôbôlôland). We might infer, upon grounds which it would be tedious to state here, that the dou of Khaha and of Maupa are of the same remote ancestry as the dou of the Koni in Sekukuniland; but they might equally well be the dou with whom the Letswalo say they have always been associated and of whom they place the origin in Lobedu; we might surmise that the dou of Selôwa and of Mathšêtê trace descent from the Khalaka, though it is not unlikely that their relatives are the dou of Sekukuni or of Khaha who early in the nineteenth century once fled to Thôbôlôland. The unravelling of the dou ancestries is no more difficult in the single area under consideration than the ancestries of at least ten other totems, found among Sotho people in that area. There are also

¹ These are kolobê, kwena, tau, phuthi, noko, talerwa, khomo, phala, pudi, and kwebo. For example, there are ba-Tau-ba-ila-dziba (the Kheôka), Tau-ya-leodza or Tau ya Mathiêtê (who are Thôbôlô), tau of Manpa, of Phalaborwa,

various Sotho who distinguish themselves not by any totem, but by some praise or non-totemic clan name; several Sotho-speaking Venda, some lacking all knowledge of the section of their origin; and not a few Tonga, most of whom have adopted some totem from their Sotho neighbours. Reckoning each of the distinctive combinations of names as of differing ancestry, as far as the Natives themselves do, we find approximately fifty unrelated constituent groups in this area.¹

Reduction of these apparently unrelated groups to their aboriginal ancestries is one of the problems of historical reconstruction we are unable to undertake; the chronology of the entry of each constituent group is another which is obviously beyond solution at present. No less difficult is the task of distinguishing cases where identity or similarity of name implies similar ancestry and where not. Similarity of ancestry cannot necessarily be inferred from similarity or identity of the descriptive name, even when accompanied by positive assertion of identity. The name may be an old one handed down by tradition and hence of significance in reconstructing interrelations, but it may also be based upon borrowing, unwarranted assumption of identity or other factors.2 The position, though not everywhere as complicated as in the area described, is essentially similar in every Sotho tribe we visited; and it indicates the need for much more intensive investigation before we can hope to understand not merely the interrelations of the Sotho but also the forces and factors that have moulded them into a distinctive people. It is necessary once more to emphasise that in our account of the Sotho we are confining ourselves to an infinitesimal portion of their history, the traditions of the present nuclear ruling group.

THE KOLOBÊ PEOPLE

We may provisionally date the migration of the Lobedu, dikolobê dža ha Mohale (the Pigs of Mohale), to the south from Bokhalaka (Rhodesia) as about the middle of the seventeenth century. They say that they preceded the Venda who do not deny them this honour. Tradition, as well as other evidence, indicate an origin to the north of, and settlement for some time among, the Karanga. Their migration appears to have been from the north-west rather than the immediate north, their first

of Tôkwa, and of Mogodoponi; they consider themselves of different ancestries. We might in addition mention various Khalaka, who are completely Sothoised, though only some have totems.

¹ This number naturally excludes clans and lineages as far as the Natives recognise them as sections of the same group.

² Many of our suggestions are liable to error for this reason, but we venture to make them in the hope that they might be of some value,

settlement after crossing the Limpopo being to the west of Louis Trichardt on the northern boundaries of present Tôkwa country. From there they spread or moved south-east to the foot of the Drakensberg round about the present Mmamathôla location. At that time, or later when the royal family of the Lobedu migrated from the Mmamathôla mountains into Bolobedu, their present reserve, the kolobê of Mmamabolo (dikolobê dza matadze) were left behind or broke away. In Bolobedu, perhaps at the beginning of the eighteenth century, they encountered and subjugated the primitive Kheôka, whose totem is tau, and who did not know the use of fire. By this time kolobe people were probably sparsely scattered over an extensive area with nuclei near Munnik and in Bolobedu. There is also evidence of a settlement of Lobedu in Phalaborwa country, and according to Phalaborwa tradition the date of this settlement, associated with a mountain named after one of the early Lobedu chiefs, Phedole, must perhaps be pushed back to about the same time. The Phalaborwa were soon after this strong enough to challenge the Lobedu (c. 1750-60) and, though defeated and pressed back to their unfavourable environment, their incursions appear to be associated with the movement northward of Mmamaila. What is clear is that after four Lobedu chiefs had reigned and towards the end of the eighteenth century, several sections (those, for example, of Sekhopo and of Rakwadu) broke away from the Bolobedu nucleus, the reason assigned being internal dissensions at or before the accession of the first woman as queen.2

The kolobê of Mmamaila, who have retained more Lobedu elements of culture than those of Sekhopo, left Bolobedu, according to the more reliable traditions, at an earlier date (c. 1750) than Sekhopo and Rakwadu.³ They moved northwards into a country then called Thôbêla, which they say was uninhabited. They were offered hospitality by the Venda⁴ in

¹c. 1740. The Phalaborwa say that they migrated from the north with the Lobedu, but this as we indicate elsewhere is confusion of early association territorially with common aboriginal origin. Early association is confirmed by the tradition among the Lobedu of the flight of Makhoba, brother of the chief and claimant to the throne, to Khebela mountain near the confluence of the Selate and the Olifants rivers. Makhoba subsequently returned to Bolobedu and when he ascended the throne (c. 1750) he assumed the name of his father, namely Phedole, after whom the mountain in Phalaborwa is named.

^a But it is possible that the appearance of the *Tôkwa* on the boundaries of *Bolobedu* and their serious though short-lived challenge to the pre-ëminence of the *Lobedu* might be associated with the internal disruptions among the *Lobedu* (1750-1790). This challenge might well be the explanation of the accession of a woman as chief.

There is corroborating evidence from the longer genealogy of the *Mmamaila* royal house and the flight northwards of a section of the *Lohedu* at the accession of *Phedole* (c. 1750).

Who thus appear to have been rulers over Thôbêla at this date.

the Ndzelele valley, but preferring independence to protection they settled first at Kwatha-ya-pitsi and then at Ubeni in the country now ruled by Karel Mmamaila. They appear to have completely dominated the Venda of Moila who still goes to them and not to Modjadji (the Queen of Bolobedu) for rain and with whom close ties of marriage as well as of tribulation during the Swazi raids (1848-54) exist. Tradition records close contacts with the Venda of Magoro and of Nngwekulu and five successive raids of the maBonyo (a comprehensive name meaning naked people and applied in the northern Transvaal indiscriminately to Swazi. maTêbêlê and Tonga). The Tonga constantly harried these kolobê people, Mzila in his war of succession (1856-62) with Mawewe settling nearby at Spelonken; and Albasini with his "Knopnose Shangaans" was raiding in these parts. In 1870 the Lobedu came to Mmamaila's assistance against Albasini, but Mmamaila's position became intolerable and he fled to, and settled for some time (1870-1888) in Sekhopo's country, returning to the north as the result of the pressure from the invading Boers (1888-90). In 1925 these kolobé people divided into two sections, under Charles and Karel Mmamaila, who are now hostile to, and practically independent of, one another.1

The kolobê of Sekhopo, who left Bolobedu during the period of internal crisis (c. 1790-1800), set out upon a nomadic career which has considerably influenced their culture, though the supremacy of Modjadji is still recognised to some extent, unlike among Mmamaila's people. Their separation from Bolobedu was followed by wars with Modjadji which drove them for protection to Sekukuniland. Continuing to be arrogant, they were expelled, and then accepted hospitality from the Mphahlélé on the Olifants River south of Chunespoort. Soon after they moved first to Bosêxa and then to near Munnik in Dikxale's country, but being proud and independent eventually returned towards Bolobedu to settle at Marotholone and round about Bodupye, some five miles south-east of their present location and near Rakwadu. This last migration was probably due to Moselekatse's advent (1828). At all events, according to tradition all the migrations took place during a single reign, that of Sephumulo, a period long enough, however, to have left a deep impression upon the culture and language of these kolobê. They have very close relations with Dikxale, a relative of whom married the khadi2 (father's sister) of

¹ Charles lives in country regarded as being under Modjadji's jurisdiction. He is seeking her assistance. Karel makes rain for Moila, but Modjadji has recognised the young boy under Charles' care as the real heir to the baMmamaila.

² The *khadi* is often more important than the chief himself in matters of tribal religion and high diplomacy. She certainly is in this case,

the present chief, and for long (1860-1924) also with the Birwa of Makxatho.¹ At the time of Sekhopo's arrival in his present country, some Kwena under Lešabana occupied Bodupye. Lešabana was ousted and his people,—who say they are baMohonatala with the praise Mangwato a moletša, and come originally from Sethsêla (Sechele) in Bechuanaland,—were scattered among various tribes in the northern Transvaal. These Kwena appear also in Tôkwa traditions, for at the height of their power, just before 1800, the Tôkwa ruled as far as the Kwena of Bodupye. In Bolobedu these same Kwena were already, towards the end of the eighteenth century, associated with the royal house, the chief taking one of them as wife² and alloting their headman a large district to rule. With Sekhopo there also broke away from Bolobedu the kolobê of Rakwadu and several other sections. Rakwadu in turn split off from Sekhopo not long after the latter's arrival at Bodupye. To-day Sekhopo has a location alloted to him by the Government, while Rakwadu has bought himself a farm.³

There is little doubt that the Lobedu have for long been the most influential tribe in the lowveld between the Luvuvhu and Olifants Rivers. Their prestige depended less upon military prowess than upon diplomacy, reputation as rain-makers and strategic position in the mountains. Their power was early in their history, probably about 1750-60, seriously challenged in the east by the Phalaborwa, and again about 1780-1810 by the Tôkwa who pressed upon their western and north-western boundaries. The Narene also pushed hard on their south and appear to have cut off a section of Lobedu kolobê from the main body.4 But on the whole these were temporary setbacks, as indeed were the losses suffered from internal dissensions, and were counterbalanced by extensive accretions. For the diplomacy of the Lobedu was based upon avoidance of wars, friendly alliances far and wide, and ready acceptance of disaffected or refugee subjects from elsewhere. Bolobedu was a well known sanctuary for these elements during, and itself was only slightly affected by, the great disturbances of the nineteeth century. The ravages of Moselekatse's armies in the south, south-west and west (1826-1830), the depredations of

¹ For this period these Birwa loba'd (begged) rain from Sekhopo, and chief Mojehodi Sekhopo (c. 1870) assisted them in a war against Math*aka's Tôkwa.

² Her daughter, Modjadji I, started the line of female chieftainnesses in Bolobedu.

³ Rakwadu's jurisdiction extends considerably beyond the farm, but it is interesting that those of his subjects living on the farm are dealt with as squatters on the model of European farmers in the neighbourhood. They are really labour tenants as well as subjects of the chief.

⁴ During the early part of the 19th century the growth of the Narene power certainly troubled the Lobedu. The danger passed when the Letswalo suffered many other reverses. About 1800 the Phalaborwa again tried conclusions with the Lobedu, but were once more pushed back to their unfavourable environment.

the cannibals in the south-east (1827-1830), Sekwati's raids (1826-1830) and Maféfé's conquests in the south (1830-40) following the rise of the Pedi under Thulare (1800-1824), the long continued turmoil and displacements of the Tonga culminating in the exploits of Albasini (1840-1860), and the invasions of the Swazi (1857-1860)—all these swept but lightly over the country of Modjadji, the Rain-Maker. When she was attacked. the consequences to her enemies were drought and famine. And on the whole her power grew with the extensive accretions from her plundered neighbours. One such accretion was the immigration of the dou of Mohokoni and with him the Thôbôlô who are tau. They are worth mentioning because they brought the rapidly spreading lelopo (pl. malopo) cult, the main feature of which is possession of individuals by spirits. These dou of Mohokoni come from the north (Bokhalaka), migrated during the last century along an eastern route, settled at Thôbôlô in the Game Reserve and despersed from there (c. 1835) as the result of the raids of Lehadimane, chief of the Mafêfê. Mohokoni received hospitality from the Lobedu but, taking advantage of the Anglo-Boer war when he rendered various services to the Boers, he threw off the protection of Modjadji and became independent.

Traditionally linked with, but at present widely different from, the Lobedu are the kolobê of Mmamabolo, dikolobê dža matadže.¹ So different are they from one another that, were it not for their identity of totem and some traditions of identical ancestry,² one would unhesitatingly ascribe them to different origins. The kolobê of Mmamabolo are far closer in language and culture to their highveld neighbours than to their lowveld kin. On the other hand the Lobedu differ less from the lowveld Sotho tribes, of whatever origin, than from their Mmamabolo kin. This not merely suggests a long period of separation and development in very different environments,³ but also arouses speculations as to whether the charac-

^{1&}quot; The pigs of Matadže." The ba Sekhopo call them "the pigs that eat sweet potatoes."

² This identity of ancestry is, except by the very oldest informants, very hotly denied by the *Lobedu*, especially the royal family. It is only vaguely affirmed by the *kolobê* of *Mmamabolo*. We need not here go into the reasons for the denial.

The account we have accepted, because of the necessity of postulating lengthy separation from the Lobedu in different environments, is also supported by the best Lobedu informants and the weight of opinion among Mmamabolo's people. According to this account the separation occurred at Munnik. But the alternative account which requires us to assume the break away of Mmamabolo from Bolobedu does not lack plausibility. The name Matadze, applied to the Mmamabolo, is also the name of a Lobedu chief and it was in the struggles between him and his brother that sections left to Narene, where in fact Mmamabolo's kolobê, according to their own traditions, were for some time. But the kolobê at Narene call themselves dikolobê dza Sebela

teristic culture elements of the Lobedu are preservations from the past or acquisitions from the older population they displaced.1 The kolobê of Mmamabolo, probably few in number, lost the stabilising support of the Lobedu as they reached the northern boundaries of the present Tôkwa locations and then settled at Byathadi, in the mountains near Haernertsburg (c. 1700). How long they stayed we do not know, but some pressure² seems to have led to the migration southwards of such sections as those of Kxopa and Madiha. Soon the whole tribe started upon a career of extensive migrations, first to Letšidele and Thabina (between the locations of Mmamathôla and Muhlava), then to Thôdwê (far east on the Olifants River) where they sojourned a few years, moving on again to Mongadune (Sekukuniland) and Jopene (Jobs Kop, south of the Maféfé). Thence they migrated to Mphohodiba and Mafofye near Byathadi and there they found the ba xa Laka (Ndebele) under a chief called Thema, whom they defeated and absorbed. In these wanderings many sections remained behind such as the kolobê of Mmanamêla,4 who remained at Letšidele when the main body moved on and who are now under Moxoboya, the kolobe of Makxoba, and other scattered elements further south and east. We are unable to fix the date or duration of these wanderings, though towards their latter half the indications are that it was the time of the

mma balobedu, distinguish themselves from Mmamabolo's kolobê and are directly identifiable as the kolobê who left during Matadze's reign. In view of the denial of relationship, especially among the Lobedu, one must not entirely exclude the possibility that the two tribes are only very remotely of the same origin.

The weight of evidence favours preservations from the past. But the extraordinary receptivity to culture traits of other Sotho and the remarkable adaptability to changing environments, social as well as physical, are factors which might upset our reconstruction. We are inclined to regard the differences between Modjadji and Mmamabolo as the result of these factors and a certain attenuation of custom interacting upon one another. For the Lobedu seem to have left with most of the kolobê nobles and with them went the rain charms and other secrets of the royal family around which Lobedu culture has crystallised. The configuration of institutions centering in the divine chief, which has enabled the numerically small nuclear group among the Lobedu to attract and hold in allegiance so many constituent groups, is absent among the Mmamabolo. Attenuation of these institutions among the latter has again facilitated adaptation to changing environments. It is worth mentioning though open to several interpretations that phala (rooibuck) is the second totem of all the Lobedu, including Mmamaaila who broke away c. 1750, but is not applied to themselves by the Mmamabolo people, who say that this totem was adopted by the Lobedu when they broke away from Mmamabolo.

Possibly the arrival of the Tôkwa, c. 1730-1750, in these parts.

³ These ba ha Thema were mentioned to us by the Phalaborwa as the same people as the dou of Bolepye and of Mašišimale.

⁴ The ba ha Mmanamêla may have been the main body from which Ramohwibidu, the ancestor of Mmamabolo, broke away. The tradition to that effect would further explain the attenuation of the Lobedu complex of culture among the people of Mmamabolo.

general movements of peoples early in the nineteenth century, when many tribes sought refuge in Sekukuniland. They eventually returned to near Haernertsburg, where after a single reign (c. 1855) succession quarrels arose. One of the chief's brothers, Sekwale, left Mmamabolo, settled first under Dikxale and later near Tzaneen, in Letswalo country, eventually returned and founded an independent tribe, occupying the northern half of the Mmamabolo location.¹

The kolobé of Mmamabolo, separated from their burial grounds near Haernertsburg, are interesting not for what they have retained of their old customs but for what they have lost. They have not played any conspicuous part in the history of either the lowveld or the highveld, to the culture complex of which they now belong; they are largely Christianised; and though all their contacts are now with the highveld, the large influx of Letswalo since 1896 is perceptibly introducing lowveld culture elements.

THE PHALABORWA AND THE ŠAI

While the Lobedu were gaining power and prestige, there came within their sphere of influence the great iron-workers of the lowveld, the more martial Phalaborwa, who also call themselves ba ha Malatše, after one of their early chiefs. The tradition as regards their ancestry is now somewhat confused owing, we surmise, to the prestige in these eastern parts of the Pedi and the late chief's sojourn among, and admiration of, the people of Sekukuniland. As both Pedi and Phalaborwa are noko (porcupines), a certain amount of plausibility attaches to the plagiarism from Pedi tradition. For the story² that the Phalaborwa were originally Mmakau (a branch of the Kxatla) and had changed their totem from Kxabo (monkey) to noko³ is denied by the Mmakau of De Wildt Station⁴ near Pretoria and is negatived by all the other evidence. In dismissing this tradition as a piece of vainglorious rationalisation, we must neverthe-

¹ Allotted in 1890. The tribe, then living at *Bergvlei*, refused to move to this location (but were compelled to do so in 1897) because their ancestral graves and lands were at *Byathadi*, which became occupied by European farmers.

² This tradition was given us by both the present chief's brother, who had been told by his father, the late chief, and by an old man who was a close associate of the late chief and had often been to Sekukuniland, whence also his wife came. It is only fair to say that the chief's brother was an extremely intelligent man and is greatly puzzled by the two traditions of *Phalaborwa* ancestry.

³ This is exactly the *Pedi* tradition. Vide D. R. Hunt, An account of the Bapedi, in Bantu Studies. Vol. v. p. 275.

⁴We paid a special visit to these *Mmakau* in order to verify the *Phalaborwa* account but found that they did not even know the *Phalaborwa*, though they confirmed the *Pedi* tradition.

less not lose sight of the significance of an early and perhaps longcontinued association between the Phalaborwa and the people living to the east of, and conquered by, the Pedi. Among several tribes north of the Olifants River we found a tradition that they came from the north accompanied by the Pedi; and this tradition is also found among the Phalaborwa who aver that, when they turned northwards again, the Pedi remained behind at Mothare. However that be, the prevailing tradition among the Phalaborwa places their remote origin in Bokhalaka, whence they migrated south by an eastern route, settling at first perhaps somewhat further south than at present; and on turning north again they left a section behind, established themselves for a while at a lake called Lebatha and then proceeded to Sealene. What is clear is that they once occupied the country near the confluence of the Letaba and Olifants Rivers. Here or a little westwards they were not the original inhabitants, displacing as they did the Salane, who lived at Nakome mountain. We meet again the legend, well-known among the Lobedu, that these aborigines were very primitive, unable to make fire and defeated by the use of fire. These Salane of whom there still are survivors are phala (rooibuck), a totem one finds nowhere else today in these parts than among the Lobedu, who are generally very anxious to deny its application to them.² There are several other historical links between Lobedu and Phalaborwa. Among the latter the tradition is that they were associated right from the beginning in Bokhalaka up to some time after their settlement in the south. This is unacceptable legend, except as far as it substantiates the tradition among both tribes of their early contact. There are mountains in Phalaborwa country associated with early settlements not merely of the Lobedu, but also of the Khaha, the Thabina, the Mahlo and an unidentified people called ba-Pudi-ba-ha-Motsana.3 This may represent a considerable confusion of chronology because the history of close contact in a distant past might be projected into a more immediate past, or the reverse, as has probably been the case of the contact with the Lobedu. But if the chronology is unreliable, the substantive asseveration of some form of early association is sometimes acceptable, and often, as here, verifiable.

¹ These are unidentified names.

² That the *Lobedu* are both *kolobê* and *phala* is amply confirmed quite apart from the diviner's bones.

³ One is inclined at first to discount the value of these traditions. But it was surprising to find confirmation among the other tribes (except the *Thabina*), though the confirmation shows that confusion of associations plays a great part in oral tradition. What is distinctly arresting is that the *Koni* of *Matala* trace their origin to *Phalaborwa* country. The *Phalaborwa* know nothing of early settlement among them of these *Koni*; it is the *Khaha* whose mountain they can identify. But in fact these *Koni* are of the same ancestry as the *Khaha*.

It is impossible to date the migration of the Phalaborwa from the north; we cannot even say when they arrived between the Letaba and Olifants Rivers. The genealogy of the royal family contains fifteen names, and this may have significance in indicating that the formative period in their history must be dated far back, but in view of the confusion in associations, we are not certain how many of these names are to be placed in or before the period of migration or in that of settlement near their present residence. All we can assert is that the latter must have been before 1700 because just after that Phedole from Bolobedu sought the hospitality of the Phalaborwa. From that time their great chief, Malatše, began expanding the dominion of his people. He appeared on the boundaries of Bolobedu and at first defeated them; he extended his sovereignty as far west as the Mathipe1 mountain. But either the supremacy of the Phalaborwa was short lived, or it was based upon isolated military exploits; for apart from their material culture, which is delicately adapted to a difficult environment.2 they appear to have borrowed rather than contributed to the culture complex of which they are now a part. They are numerically unimportant and their small, sparsely populated, broken-up settlements of today are probably indicative of the causes of their decline, namely unfavourable environment and internal dissensions. They only of the various tribes early associated with them remained in the unfavourable environment. Wars are recorded against the Pedi (c. 1790), and the Lobedu (c. 1800); then came raids first (1827-30) of the cannibals from Mapulaneng whose totem was thete (the manure worm) and then of Manukosi (c. 1840). The Šai were now strong enough to demand the

¹ Not identified, but said to be near Gravelotte and Leydsdorp.

It is very difficult to understand why the Phalaborwa, of all the tribes with whom they were associated, remained in their unfavourable environment. Perhaps delicate adaptation to the environment made them indifferent to the healthier lands to the west, to which all their neighbours moved. Certainly some say that Phalaborwa is a name indicating the superiority (ho phala, to exceed) of their country over the south (borwa, south) whence they came. For all that, during years of famine, which are fairly frequent owing to the uncertainty of the rains, large numbers of Phalaborwa today still migrate westwards. It is possible to interpret the military expeditions against the peace loving Lobedu, for the fighting was always far away from Phalaborua and mostly in the Bolobedu mountains, either as attempts to escape the unfavourable environment and to oust the Lobedu from the proverbially fertile and well watered country, or as military exploits against a growing power whose predominant influence was being resented or again simply as the depredations of famine-stricken sections seeking settlement in better country. It is certainly significant that beside the Tôkwa, the Lobedu hate the Pholaborwa most of all the Sotho tribes; in neither instance is there today any apparent reason for such feelings, which appear to be heritages from rivalry in the past. The Lobedu say they did not like the Phalaborwa habit of coming to hoe in their country, which seems to indicate periodical temporary settlements of Phalaborwa driven by famine to trespass into Bolobedu,

fixing of boundaries though they had previously for about fifty years being living in territory subject to the sovereignty of the Phalaborwa. More serious for the decline of Phalaborwa power were the continuous internal dissensions, especially later when a united front might have preserved them from the worst effects of the early nineteenth century disturbances. A section on the Olifants River broke away early, perhaps 1700; another went to Têbêlê country near Chunespoort, c. 1760, and they are said to be the Letwaba-la-ha-malatše; still another left for Thôbôlô, probably about 1800. Memories are vague as to when and why these sections left, though it was clearly long before the great movements of the nineteenth century when many Phalaborwa sought refuge in Bolobedu, Bokhaha, Narene and elsewhere. It was during this period that internecine strife finally shattered the tribe. First Masêkê (c. 1830), then Makhušane (c. 1860) and finally Selwana (1900) broke away to live as independent chiefs within the area between the Letaba and the Olifants Rivers. The struggle was so fierce and protracted that the contending parties on several occasions appealed for foreign help. Military intervention thus came from Albasini (c. 1860) and from the Tonga of Portuguese East Africa (c. 1870); while Modjadji was asked to interfere, diplomatically, on two occasions. Today the Phalaborwa are influenced mainly from Bolobedu and Mapulaneng. They are undoubtedly a people among whom many of the complex problems and relationships of the old Sotho population near Swaziland might with advantage be investigated. The great contribution they seem to have made to the culture of the numerous tribes that have originated from, passed by or come into contact with their country (both when it was in the south and at present) is the complex of institutions called Komana, a kind of sacred drum cult which, whatever its original nature, has readily become part of the initiation, first-fruits and rain-making ceremonies.

The Phalaborwa have come to dominate, at least culturally, one tribe, the Sai or Tsupye, dou of Mašišimale. These people come from Tubatsi near Steelpoort, where Masiye was their chief. It was his son Mašišimale who (c. 1800) migrated to the Tsupye mountain in Phalaborwa country and just southwest of their present location. They had no cattle and their women are said to have worn Zulu dress. Their ancestry is by no means clear. We may provisionally dismiss the suggestion that they are Ndzundza Ndebele (though the latter also once settled at Ndubasi); the evidence is not convincing, and the suggestion appears to be calculated

¹ The Letwaba are Ndebele, who call themselves ba Maune. The association of the Pholaborwa with the Letwaba is of more than casual interest. There are several other suggestive links between the people in the old Phalaborwa country and the Ndebele. Some of them are noted in the next foot note.

defamation.¹ The truth seems to be that the Sai are of true Sotho stock, as indeed they are regarded by their Sotho neighbours. These are not numerous, and though the legend of the fixing of their boundaries (c. 1840) indicates that they had by then shaken off the sovereignty of the Phalaborwa, they have lost all peculiarities distinguishing them from the latter. Their affinities² are thus with the Sotho tribes north of the Olifants river rather than with the Pedi and considerable sections of them have become scattered among the Lobedu, Mahlo, Thabina and other tribes.

THE NARENE AND THE THABINA

The Narene, as they are called from their totem nare (buffalo), are the second largest Sotho tribe in the lowveld; they, like the Lobedu, are essentially a mountain people having for long lived on the northern slopes of the Drakensberg. At present they consist of two sections, the Mahlo and the Letswalo, separated by the Khaka, the Thabina and the Nkuna³ who have driven a wedge between them. There is a tradition held only

¹ Yet, as the associations upon which the defamation is based are plausible, the matter is worthy of further investigation. The conditions of enquiry were very unfavourable when we visited as the chief had only recently been installed and was both reticent and suspicious. An old man of Phalaborwa uncestry affirmed that the Sai were originally Madzudza (Ndzundza) Ndebele and that the late chief was the last openly to admit this origin. This information was given very secretly, but it gained significance when we discovered that the appellation was regarded as unnecessarily insulting by some and was not denied by others. The imputation was fiercely denied by the present chief, though neither he nor his councillors could suggest what their origin really was. The Phalaborwa informant's assertion, if meant to be derogatory, is intelligible because he is one of those embittered Phalaborwa who have become subjected to their former vassals owing to the redrawing of boundaries by the European. The extraordinary thing about these boundaries is that the Sai have never claimed jurisdiction, and the chief may not live, north of the Selati, yet the greater portion of the Sai location is north of this river. But in spite of the embitterment, there might be truth in the suggestion of the Ndebele origin of the Sai. There is the tradition that the dou of Lepye, who are Sai, have a section under Thema near Pietersburg. These may be the ba ha Thema, baxa Laka, mentioned by the Mmamabolo, and who are Ndebele. The baxa Laka (Langa) have a tradition that they come from Zululand and at first settled near Leydsdorp, before moving across the Drakensberg to near Pietersburg. But this associates them as much with the Phalaborwa as with the Sai, and indeed there is a Phalaborwa tradition that in the old days there were among them ba Thokwa (the Sotho equivalent of the Zulu term aba Ntungwa) a name sometimes applied to the Ndebele).

² We can say nothing of affinities of these and other lowveld tribes with the Sotho of what is called Mapulaneng, the area round about Graskop. The language of the Sai, as well as of the Mahlo, Khaha, Thabina, and Phalaborwa has prefix the for Sepedi se, e.g. thepedi for sepedi; thepela for sepela; also lêtha for lêsa; theba for tsêba.

³ The Mafêfê do not geographically lie between the sections, as they live on the southern slopes of the mountain, which forms a formidable carrier.

among the Mahlo, the senior section, that the Narene came from Bokhalaka by an eastern route, that a section remained among the Venda and that they settled in the Drakensberg range after the Lobedu. The more widespread tradition, found among both the Mahlo and the Letswalo, traces their origin to the south-east. The early association with the Phalaborwa is consistent with both traditions; the section among the Venda might be the Laudzi who say they come from Phalaborwa, especially as there is a tradition, most alive among the nare of Mmamathôla that the Narene come from Bolaodi in Mapulaneng. The weight of evidence, though not conclusive, favours migration from the south-east but does not exclude a remote origin in Bokhalaka. We can therefore, in the present state of our knowledge, and following the account of the majority of informants, 2 assume an ancestry from Sotho stock in the country beyond Graskop towards and into Swaziland. Whatever the cause of the migration.3 the first recorded settlement (c. 1700) was in Phalaborwa.4 The Narene then proceeded westwards along the Olifants river, but in the second reign after the first settlement, the chief had sore eyes (mahlo) and remained resting (ho kutša) at Sêrôwa, in the present country of the Mahlo, while a younger brother of the chief, with his followers, went hunting and exploring westwards along the valleys and foothills of the Drakensberg as far as Mmamabolo's country. Thus the followers of Sekôrôrô, nicknamed mahlo, the senior branch of the Narene, became distinguished as baMahlo and baKutšwe.5 The Letswalo though hunting

¹Two traditions also exist, as we have noted, among the Phalaborwa.

² Some among the *Mahlo* and all among the *Letswalo*. The latter consisted of practically all the old men in the tribe of *Mmamathôla*, who gathered in a large pitšo (tribal gathering) to give us information. The conditions were also much more satisfactory than among the *Mahlo* who were both suspicious and reticent. There the "official" informants denied a south-eastern origin, but one old man, an ntona (councillor) of the chief, in an unguarded moment, did not hesitate to assert an origin from near Swaziland. The *Mahlo* still have fairly close relations with the *Pulana*, the chief there having married the present regent's sister.

³ The Letswalo say that they left because of quarrels with the maBonyo (naked people who are identified generally with the Swazi) but this rationalisation is anachronistic. There undoubtedly must have been some disturbances (unrecorded) to have caused so many peoples to move northwards from Bolandi. These movements, for example of the Narene, the Phalaborwa, and the Khaha, appear all to fall within the period 1650-1700.

⁴ This Phalaborwa is not necessarily the country of the present Phalaborwa. We are inclined to place it somewhat to the south, a country to which several Sotho tribes fled about 1650 and whence they dispersed in different directions. The Letswalo aver that they were accompanied by the Mampa under Matenbane, who are said to be Pedi with the totem dou and are at present living in the mountains just south of Mmamathôla's location. They are probably Koni.

⁵ There are Kutswe near Graskop today, but their totem is kwena not nare and the Mahlo do not claim relationship with them. Their chiefs are rain makers like those of the Mahlo.

far to the west, continued for a time to send the diaphram (letswalo) to Sekôrôrô, but gradually lost touch with him and became independent. This was probably towards the middle of the eighteenth century.

The Mahlo or Kutšwe seem to have settled down quietly until a section under Kxantswane left them to live near Ohrigstad, where he sought refuge from the dreaded cannibals³ (1827-1830) and settled. The cannibals caused some displacement of sections of this and other tribes, but otherwise have left but little impression except in the lively accounts of their atrocities. From about this time the influence of the Mahlo extended considerably. They held sway over the Koni of Mamidja (1840-1890), and though nominally falling under the sovereignty of the great Pedi empire in the south, from whom a section broke away under Lekxadimang to live with Sekôrôrô, their alliance with the Pedi chief was a source of strength to them. From about 1850 for the next forty years Lehadimane, the Mafêfê chief, with the support of Sekwati, ruled over the Mahlo, the baha Mamidja, Maake's Khaha and the Thabina. When Lehadimane died (c. 1900) there was a dispute as to the succession among the Mafêfê, the regent went to Sekukuni for assistance and Mafêfê II took refuge with Maake. In 1901, at Sekukuni's instigation, his ally Sekôrôrô the Mahlo chief, assisted by the ba ha Masome (then under Maake) attacked Maake and the Nkuna, a Tonga tribe then subservient to Maake. The Mahlo retained nominal sovereignty over the baha Mamidja until 1901, when the Boers, with a view to avoiding friction, separated the two tribes. The Mahlo are at present a very mixed tribe containing, among others, large groups of tau, koni (from Moraba), dou, noko from both Moxoboya and Phalaborwa, and kolobê; but practically all Tonga have been expelled. Both their language and their culture reflect the associations and vicissitudes of the past: the early contact with the Phalaborwa (and eastern Sotho) complex, the domination of the Pedi and

¹ This is the explanation given by the Mahlo. The Letswalo disagree and say that Letswalo was one of the names of the second chief of the Narene, Sekukunoko, who broke away to found the Letswalo section.

² The Letswalo aver that the Lobedu were already on their northern boundaries, but Moxoboya had not yet arrived. We must also assume that the Khaha were still round about Leydsdorp as otherwise they would have arrested the westward expansion of the Narene.

These cannibals are identified by the Mahlo as the baxa Moraba in Pilgrims Rest district but are clearly the remnants of many tribes to the east of Pediland who had been driven to anthrophagy by the depredations of Moselekatse (1826-1828). These cannibals are heard of among many tribes to the north of the Olifant river such as the Phalaborwa, the Sai, the Mahlo, the Khaha and others. They seem to have made several incursions into the area we are considering, but disappeared from the scene about 1830 or 1831, presumably being reduced to subjection or discipline by the Pedi under Sekwati, They are generally known as the maKhêma (cannibals).

Mafêfê for half a century, and the attenuated southward diffusion of Lobedu culture elements.

The Letswalo who, like their senior brothers, the Mahlo, have both nare and khomo as totems, first conquered the original inhabitants, the ba ha Mphelo who were subjects of, and fled to, the Lobedu. They then (c. 1760-1790) extended their territory up the mountains, occupying the whole country now in possession of Moxoboya and Mmamathôla to the boundaries of the Lobedu, and eventually ruling over practically half the present Nkuna location.² There were brushes with the Khaha near Leydsdorp (c. 1760), who however only towards 1840 began pressing in the Letswalo boundaries both from the east (Maake) and from the west (Maupa). Moxoboya's Thabina were also being pushed westwards from near Leydsdorp; the Letswalo assisted them against their overlords the baha Masome, at one time (c. 1845-1855) ruling over them. Again on occasion (between 1868 and 1886) the Letswalo gave refuge to the Nkuna. But from the beginning of the second quarter of the nineteenth century, except for occasional advantages accruing from their alliance with the conquering Mafêfê, the Letswalo have suffered serious reverses, the most far-reaching being probably internal dissensions which eventually made them an easy prey to the advancing European settler. It is not necessary to describe in more than very broad outline these internal dissensions. About 1828 one section left under Tsolobolo; they settled within the Letswalo area near Duiveldeloof, but so near the Khaha of Maupa that there were several wars between them, in one of which (c. 1856) Tsolobolo was assisted by the Nkuna who were then his subjects. This was during the reign of Podile (c. 1828-1859), the great hero of Letswalo history, who assisted his kinsman Tsolobolo against Maupa. Podile's reign marks both the heroic period and the decline of the Letswalo. After his death one chief after the other was killed and internecine succession struggles raged,3 with the result that Thathani and Seitswadi, now independent chiefs like

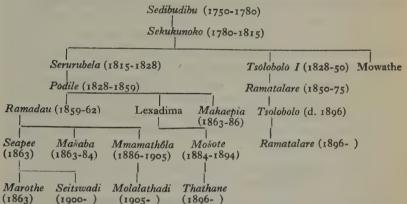
¹ The Letaba river, which even today is recognised as the boundary between *Letswalo* and *Lobedu*. The *Lobedu* say that *Rramaphelo* (the *ba-ha Mphelo*) had crossed the Letaba without their permission and was called back, not driven over the river by the *Letswalo*.

² As far as the *Thabina* river in the east. This was in the reign of *Serurubela* (c. 1815-28)

The trouble started because Ramadau, son of Podile (see table below), refused to marry his one eyed cross cousin. Podile himself then married her but she stole some rain charms, threw them in the river, and was killed by a lion. Makaepia, Podile's daughter who was a great rain-maker, replaced the lost charms, but only some of them were given to Ramadau. The stage was thus set for trouble after Podile's death. This story is probably largely a rationalisation to justify the accession of a woman to the throne and to make acceptable the introduction of the Lobedu pattern of royal institutions.

Tsolobolo, broke away, leaving Mmamathôla with a much diminished following. For a time Mmamathôla (c. 1886-1890) was a fugitive among her former vassals, the Thabina of Moxoboya.¹ Concommitant with internal disruption, disaster befell the tribe from without. In about 1840 one of Moselekatse's impis penetrated into the country; then followed the successive raids of the Swazi (1857-1860), war with the Lobedu (c. 1863)

Internecine succession struggles are a feature of many Sotho traditions. As this is a fair example though not by any means as complicated and protracted as some, for example those among the Tôkwa, we set out a table based upon the information given us by Mmamathôlu. The dates, inferred from various surrounding events, must be taken as mere approximations. Names of chiefs are in italics.



Notes: Sekukunoko was the first ruler over the Letswalo in their present country. He had three sons: (a) Mowathe who moved off to Westphalia, near Duivelskloof, and founded the Tsolobolo section; he was murdered by his brother's son, Podile c. 1828; (b) Tsolobolo, the second son, who followed Mowathe and became the ancestor of the present dynasty of the Tsolobolo section; and (c) Serurubela who ruled over the main section until he was murdered by Mowathe (1828). Podile's son, Ramadau, imperfectly equipped with rain charms, was largely dependent upon Makaepia who during the former's short reign (1859-62) was astutely aspiring to the chieftainship and by marrying Mmamathôla, daughter of Ramadau, was a strong claimant to the throne on Ramadau's death in 1862 at the hands of the invading Swazi. But Makaepia was a woman and, though eligible according to the pattern of the Lobedu, who were being imitated wherever their influence extended, she had to contend with various sections of her people before she was accepted. Seapee, the real heir, was murdered by Marothe, his son (1863) who in turn suffered assassination at the hands of Seapee's friends. Mašaba and Mošate now accepted the challenge of Makaepia (1863). Fortune fluctuated until in 1884 Mašaba, now leader of the larger section, was deposed by Mošate who ruled until his defeat by the Boers in 1894. His section was in fact recognised by the Boers and received a location which they lost in 1894; it is now living on various European farms under Thathane, the son of Mošate. Makaepia continued to have a considerable following, but during Mošate's ascendancy (in 1886-1890) had to flee for protection to Moxoboya. Her wife, Mmamathôla who was given the rain-charms, succeeded her in 1886, and her son Molalathadi has since 1905 been ruling a section to whom the present location was allotted. Lastly Seitsvadi, son of Seapee, in about 1900 broke away to form the fourth independent section of the Letswalo.

and with Mampye, chief of Maupa's Khaha (c. 1865), and an invasion from Sekukuniland (c. 1870-80). Thereafter, following the gradual encroachment of European settlers (1885-1890), they were overwhelmed in the Boer war against Makxoba1 (1894) which ended in the tragedy of the deportation of a large portion of the tribe to Hamanskraal, near Pretoria. The tribe has never recovered from these calamities, a small section only living in the present Mmamathôla location, allotted after the Anglo-Boer war, the vast majority being scattered partly in neighbouring farms and partly over the whole of the northern Transvaal. They have also suffered serious losses in the east. Muhlava and Maake have gradually pressed into, and appropriated, portions of Letswalo territory.² Even Moxoboya, once protected by the Letswalo against the baha Masome, ousted them from the Thabina valley in which he had found refuge. The Letswalo will probably never regain their former prestige, as much of their old country, lying outside the Released Area, is irretrievably lost to them, but their scattered people have not been without influence in certain parts such as among the Mmamabolo and in Makxoba's country. Their culture has become completely Lobeduised, which may be regarded both as the cause of some of their internal dissensions and the result of a period of comparative chaos.

Usually classified with the *Phalaborwa* and belonging to the same totem, *noko* (porcupine), are *Moxoboya's* people. We may briefly consider them here because of their affinities, in language and culture, with the *Narene*. They designate themselves *baThabina*, *baPedi*, *baThsware*. They as well as the *Phalaborwa* deny all kinship between the two *noko*³ groups. They pretend to know nothing of their migrations, asserting that they always had lived in their present environment.⁴ But

¹ Mosote and Mmamathôla, though enemies, as well as Tsolobolo, joined Makxoba against the Boers. Mosote and Tsolobolo who were captured both died in prison, 1896.

Muhlava secured his location by superior knowledge of the ways of the white man and by innate common sense, sadly lacking among his Sotho neighbours in their dealings with Europeans. Maake's advance from the east was no doubt largely to escape from the unhealthy low country around Leydsdorp.

³ The Thabina are "hedgehogs," the Phalaborwa "porcupines," the Sotho for both of which is noko. This at least is the differentiation the Natives make.

⁴ This assertion must be treated with reserve if not suspicion, though we have it from the chief and his old men. Our questions as regards ancestry were, however, not answered in a straightforward manner, and privately we heard from an important ntona (councillor) that there exists a tradition of an origin elsewhere, namely Thsware, which he was inclined to place in Bokhalaka. The reticence or evasion as regards origin is probably not unconnected with fear that they, being newcomers, might be deprived of their country. We have no evidence whether the valley of their residence is called after them or they after the valley. The latter seems more likely as they have only recently emerged as an independent tribe.

that is negatived by their early contact with the incoming Khaha of Maake (c. 1750) near Leydsdorp, and their subjection to the baha Masome¹ up to c. 1828 who lived near the Mahlo, presumably in the same environment. They emerge as a more considerable tribe only after their return from the flight to the Mafêfê during the short interlude of the cannibals' depredations (c. 1828-1830), and it is perhaps only then that they occupied the Thabina valley. The Letswalo, who ruled over them for a time (c. 1845-55), say they are noko from Sekukuniland, but this as well as the suggestion of their origin in Bokhalaka are mere guesses.2 We obtained a list of nine chiefs3 who had lived in Thabina valley, but cannot necessarily infer lengthy settlement there from this list. Although they still have close political affiliations with the Maféfé, and the name baPedi is significant as to their true ancestry, it is remarkable that all their fundamental institutions⁴ belong to the Lobedu complex and differ completely from those of the Pedi. Assuming, on the balance of probabilities, that they came from the south or south-east, c. 1750, we are inclined to conclude that the Thabina arrived in small numbers, so that they readily accepted, and assimilated themselves to, the culture of the people, among others the baha Masome, under whom they lived to the north of the Olifants river. They bury their chiefs facing east, towards Serare hill in Maake's country, where they have their ancestral burial grounds. But in their history, as given to us, there is a conspicuous absence of any reference to their subjection to the Khaha, as well as to the baha Masome

¹We know nothing of the baha Masome. They appear in the history of several tribes up to about 1850, but have lost all importance at present. Their present chief is Lekhekhe, living on a European farm. How long they held Moxoboya in subjection we do not know; but it was in Podile's reign (1828-1859) that the Masone people chased the Thabina away and that the latter sought refuge with the Letswalo. The insignificance of the baha Masome is perhaps an indication of the small group from which the Thabina originated.

² In the lowveld whenever there was doubt as to origin, we observed a strong inclination to allege migration from *Bokhalaka*. This may contain a substratum of truth as far as remote origin is concerned, but usually it merely reflects the influence of the tradition of some predominant group such as the *Lobedu*.

³ Serurubele, Sefélèle. Sekhoba, Lezolo, Lesêdzê, Ramoba, Dau, Malesole and Modado. The first name suggests Serurubela of the Letswalo, and one suspects that some names are names of headmen under other chiefs, while among the names there is at least one regent, probably more.

⁴ The rain cult, the initiation schools, the ritual suicide of the chief, the religion and the bride wealth system. It is interesting in this connection to remind oneself that Mmanaméla, a section of Mmanabolo's kolobê, remained at Thabina when the main body returned to Byathadi. It has been suggested that the Thabina are the descendants of Mmanaméla, but that is most unlikely, though its significance as regards long contact must not be lightly dismissed. The language of the Thabina has the same peculiar dialectical the for the Sepedise, that we have noted for the Phalaborwa, the Mahlo and Maake's Khaha. In Khelobedu, this se becomes khe.

and the *Letswalo*, side by side however with the usual accounts of raids by cannibals, Swazi and *Maféfé*.

THE KONI AND THE KHAHA (KXAXA)

The Koni in the area of the Northern Transvaal include the baha Mamidja, the Khaha of Maake and of Maupa, the Koni of Matala1 and of Dikxale. They all recognise phuthi (duiker) as their original totem, but at Dikxale's the alternatives phiri (hyena) and thanthahane (small bird) are now almost exclusively heard; among the baMatala the most common is thanthahane, whereas the lowveld tribes almost invariably mention only phuthi.2 The origin of these Koni is everywhere regarded to be in the east or south-east.3 Mamidja traditions indicate a country near Swaziland, and Maake, one of whose main praises is molaodi, mentions Sellale, a mountain beyond Mapulaneng. In conformity with the vogue in the lowveld, there is also a tradition that the Khaha migrated originally from Bokhalaka, some aver accompanied by the Pedi. Although we deal with the Koni both of the lowveld and of the highveld together, it must not be assumed that they belong to the same culture area—the different physical and social environments have, as in the case of the Kolobé peoples, greatly differentiated these kindred sections. The highveld Koni are typically highveld tribes rather than of the same culture as their lowveld kin.

The Khaha of Maake assert that on their way from the south-east there came with them the Mahlo and the Koni of Mamidja and of Mphahlélé. Together they passed through the country of the Pulana and of Moraba, leaving Mamidja on the Olifants river and passing on to

The Matala claim to be the people who introduced the bodika (boy's circumcision school) to the Sotho. All tribes, they aver, when starting the bodika, say "we are going to Matala." This is interesting in view of the possibility that circumcision might have come to the Sotho from the Nguni through their Sothoised descendants, the Koni. The links in the chain of reasoning are extremely tenuous, but not without suggestiveness to the investigator. It is suggestive in another direction that the present (July, 1937) Matala school is being conducted by a "doctor" from Bolobedu, who also came to make rain for Matala.

² The Khaha, but not the baha Manuidja, eat the meat of the phuthi. The baha Mamidja say they are baKoni; among the people of Maake and Maupa the emphasis is on the fact that they are baKhaha, while the highveld tribes call themselves baKoni not baKhaha, though they have a tradition that they once had settled in the country Bokhaha.

⁸ Except perhaps among the *Koni* of *Dikxale*. The old men there were unwilling informants and refused to go further back in their traditions than the separation from *Matala*, in whose country they asserted they were created. We did not see the chief, who is so weak-minded that the administration has set up a council to rule in his stead.

⁴ Molaodi means "person of Bolaodi," a name also associated with the ancestry of the Narene and some sections of the Venda.

Thšuthšwe (on the farm Rooiwater), a few miles northwest of Leydsdorp. There they settled for some time before some Koni¹ broke away from them in the direction of Middelburg; and there also they found the aboriginal ba-ha-Sédza-Phala, the same people as the phala to whom Phalaborwa traditions refer.2 The early association with the Phalaborwa, east of Thšuthšwe is not remembered, but may confidently be surmised and dated back perhaps to just before 1700 so that the arrival at Leydsdorp might have been c. 1750. There were early brushes with the Letswalo and Thabina of Moxoboya who were then in this environment, and then more serious conflicts with the Majêfê,3 who from c. 1838 exercised some sovereignty over them. But though dominated for long by the Mafêfê, the Khaha maintained close relations with the Lobedu, whose institutions were closely copied since the accession of Maale (c. 1829), the first woman to be chief of the Khaha. Toward 1830 the cannibals raided the country and the Khaha fled to Bothôbôlô, returning after a year or two to Thšuthšwe, but soon moving westwards to Serare. At this time or just before, the Khaha of Maupa moved off and settled near Duivelskloof on the boundaries of both Letswalo and Lobedu country; 4 they would have been reduced to subjection or assimilated completely by the Lobedu, were it not that the latter's expansive and absorptive powers were considerably reduced by the advent of the White man. About 1840 the Nkuna arrived and were given leave to settle under Maale in the mountains at Leydsdorp. Some years later the Khaha moved into the Thabina valley, no doubt owing at first to the disturbances caused by wars between the Mafêfê and other tribes, and later Swazi raids. The alliance with Mafêfê brought

¹The best remembered are the *Mphahlêlê*, who as late as 1914 came for rain to *Maake*.

² The Salane mentioned by the Phalaborwa, like the ba-ha-Sêdza-Phala, were very primitive and had no ruler.

We did not visit the Mafêfê, but saw evidences of their influence from the Mahlo to the Letswalo. According to Pedi tradition (D. R. Hunt, An account of the Bapedi, in Bantu Studies, Vol. V, p 283) a section of the Pedi under Molamoso fled c. 1795 from Thulare, the Pedi chief, crossed the Oliphants river and settled on the Mohlapetsi river in the present Maxakala location. These were the Mafêfê who proceeded to conquer the tribes on the northern slopes of Drakensberg up to the boundaries of Bolobedu. It was Lehadimane (or Lexadimang) their chief, who dominated the people of Muhlava, Maake, Moxoboya and Sekôrôrô. Maake presumebly came under the Mofêfê's control, c. 1838, when he moved westwards.

⁴ Mampye the second chief of these Khaha (c. 1850-1878), seems to have got into trouble with all his neighbours. The Lobedu certainly tried to secure his submission but with indifferent success. Mampye eventually had to flee to Sekhopo as a result of internal dissensions, apparently instigated and aggravated by the Lobedu, who fought on the side of the claimant to the throne. But this successor (1880-1910) remained independent of the Lobedu, in 1894 joined the Makxoha war against the Boers, fled beyond the Limpopo and returned in 1902.

some internal dissension, for after the death of Maale, there was a war of succession between the son of Maale's sister who married at Maféfé's and the son of one of her wives, who was defeated and escaped to Bolobedu (c. 1875). Maake's Khaha also waged war against their Maupa kin, then under Mampye² (c. 1850) and were concerned in the struggle for chieftainship among the Maféfé (1900-01). The Khaha have very largely fallen under the influence of the Lobedu who have contributed much to the pattern of institutions of the royal house.

Very different are the highveld Koni of Matala (Matlala) who trace their origin to Phalaborwa and Bokhaha, a significant confirmation of the traditions of the Phalaborwa. These Koni claim to be the kin of the Khaha and of Mphahlélé; the Khaha deny relationship with Matala but aver that Mphahlélé is their (far off) younger brother. Whatever the interpretation of these and similar associations, we surmise that the separation of the Matala and the Khaha should antedate 1750 or the time that Mphahlélé split from the Khaha³. Taking into consideration the list of chiefs obtained, we suggest a migration date on to the highveld of c. 1730. Before that, the available evidence indicates, the Matala were

¹ Maale, like many females in the lowveld who ascended the throne, including her contemporary Modjadji, had no children. Modjadji, it is said, was barren. Both Modjadji and Maale were succeeded by the issue of their sisters, though that sister was a mothanone (wife of a chief) among the Lobedu. There are other circumstances which point to close links between the two chieftainnesses and suggest that the Khaha were beginning to adopt the peculiar Lobedu constellation of institutions surrounding the royal family. This constellation appears also among Mmamaila's kolobê, the Letsvealo and Makroba's dou. Among the last mentioned a woman is at present ruling; she has no children and her successor will be the issue of her chief wife who is her cross-cousin. In no case may such a queen have an official husband, and in every case the heir is the issue of one of the bakhomana (royal relatives) specially appointed for the purpose. The present Maahe was officially married before she succeeded. The tribe demanded either renunciation of the husband or abdication in favour of her successor. She chose the latter, and is now regent during his minority.

² Mampye seems to have been warlike and determined. In about 1865, the Nkuna, after defeat at the hands of Matêfê and his allies, fled to the Letswalo but suspecting treachery because of the latter's alliance with Mafêfê sought the hospitality of Modjadji. It was a year of drought, but Modjadji sent locusts so that the Nkuna should not perish of hunger. The drought was attributed to Mampye who was trying to emulate the great rain-maker. Modjadji complained that Mampye was a quack whose meddling with her sacred prerogatives so near her boundaries prevented the rain from falling. All this is very characteristic of Lobedu diplomacy; it certainly enabled Modjadji to send her grateful subjects, the Nkuna, against Mampye. His cattle were taken, but he remained obstinately independent upon the Lobedu boundary.

^a The Khaha deny kinship with such Koni tribes as the people of Mathabatha, of Motapo, of Mothiba and of Nkwane, the Maja and the Thiwene. Matala claims relationship with Mothiba and Nkwane but not with the others. The significance of this for the purposes of historical reconstruction is doubtful.

probably gradually pushing westwards along the slopes of the Drakensberg which they appear to have scaled in the vicinity of Haenertsberg. For a time they settled in the present country of the Mašašane. 1 From there some migrated southwards to Mosetha2 on the Aapies river near Hamanskraal, later returning to join the main body, which had moved westward to Makxabeng near the Maxalakwena river (c. 1790-1800)3. Later when the maTêbêlê started raiding, large sections of the tribe either broke away or were scattered, for example Dikxale, Mothibe and Nkwane.4 During this period they seem to have been largely influenced by the *Pedi*. When conditions were normal again, the Koni were distributed far and wide, and they claimed sovereignty even over the Xananwa when the latter crossed the Maxalakwena river to the west of Blaauwberg. The Matala seem to have pressed back the Ndebele⁵ somewhat, and more recently have given ground to the encroaching Xananwa; but on the highveld there is no such predominant tribe as the Lobedu in the lowveld, and the Matala, Moletše and Tôkwa appear to have held one another in equilibrium for long.

According to tradition, the *Dikxale Koni* are the representatives of the section which fled to *Maroteng* (Sekukuniland). They left behind many *Koni*⁶ when they migrated from there to *Mmamabolo's* country, these latter people then being at *Letšidele* (c. 1830). They first settled in the present country of J. Mmamabolo (near Doornfontein), their southern boundary before the arrival of the *Kolobé* touching that of the *Molepo*⁷ in

Molaotsi (Blood river) and Khorolwane (near Marabastad) are two names associated with their sojourn in this country in the Pietersburg district. Molaotsi is strangely reminiscent of Laudzi and Laodi and may be a link with the distant past when the Koni lived in Boloadi (mentioned by the Khaha). Somewhere in the country round about Pietersburg the Matala found the Nwepe, an unidentified people (Ndebele?) who were easily subjected. There must have been fairly close association with the Ndebele in the south as since early times Sebetiela came and still comes for rain to Matala.

² Where the baKxatla ba Mosethla now live. This tradition is suspect as it was given to us by an old man who comes from Kxatla country (Skildpadfontein).

³ Date computed from the fact that Moselekatse arrived in the next reign.

⁴ So extensive was the dispersal especially to Sekukuniland that the *Moletie* sometimes call the *Koni* the people of Sekukuni.

⁵ The Ndebele had been in these parts for several centuries; one finds some of them much further north, for example in Dikxale's country.

⁶ For example Matlala a thaba, Matlala a khoduku and Matlala a lexodu.

⁷ We were unable to see the chief of *Molepo* who was said to be very ill. It was even hinted that he had died. The people thus refused to give us any information. We gathered that the *Molepo* were *dou* from Legali. From them broke away *Makxoba* (c. 1800) migrating to Maguba's Kloof, while they moved into their present location.

the south and south-east. Later *Dikxale* moved northwards, finding there some *Ndebele*, though the *Venda* were the real owners.¹

THE TÔKWA (BATLÔKWA) AND THE BIRWA

The two main sections into which the Tôkwa of the Northern Transvaal are now divided have somewhat differing traditions as to their early history. There is general agreement that originally their totem was thakadu (ant bear), though now it is nkwe (leopard); and that at one period they had lived in the far south, which is, according to most traditions, also regarded as the place of origin. But some old men of Mmathšaka speak of an origin near their present location, whence during Moselekatse's raids they fled to Bokhalaka and from there migrated far south-west (to the place usually regarded as that of their origin) before returning to their original habitat. That the tribe or a large part of it did for a time sojourn in Bokhalaka has other good evidence in its support,² but in most accounts this event takes place after the arrival from the south, not before. The great preponderance of evidence³ favours a southern origin, the names associated with which being Sikonvela and Tôkwene.4 The exact locality of these is not known, but Rustenburg, the sources of the Vaal and somewhere otherside (to the south of) Basutoland are vaguely indicated. They still claim relationship with Matlala's Tlôkwa who have the totem takadu and now live at Tlôkweng in the Gaberones district (Bechuanaland Protectorate).5

The Tôkwa are certainly not the baTlôkwa⁶ who migrated with Mantatise and Sikonyela, because we have to postulate a date at least a century earlier for their arrival in the Potgietersrust district, in which,

¹ There is no *Venda* headman, but a section called the *Mathatho* is still exempted from the usual labour in the field, in recognition of the fact that they were the original owners of the land.

² It is mentioned in the *Komana* (an initiation school) how one *Thabola* remained in *Bokhalaha* when the main body returned.

³ Alone among the tribes of the northern Transvaal, the *Tôkwa* have large villages which are organised into wards, reminiscent of the *Tswana*.

Sikonyela is described both as the name of a country and of a chief. Tôkwene, meaning "at the place Tôkwa," is not very distinctive.

Math*aka, but not Ramokxopa, avers that these Tlôkwa broke away from them in the south (Rustenburg?). There are at present Tlôkwa in Rustenburg and Pilansburg districts in the Transvaal, and also in and immediately to the north and south of Basutoland. No links exist with these but it is observable that the places of origin are said to be exactly where these Tlôkwa are found at present.

⁶ It is perhaps not necessary to point out that in the northern Transvaal the laterals of the South become alveolars, so that Tlôkwa in the south becomes Tôkwa in the north. The Tôkwa must not be confused with the Thokwa (maTêbêlê) under Mmalebôxô, who are insignificant in numbers. (Thokwa < ntungwa.)</p>

according to tradition, they settled for a time at Moletane. Early in the eighteenth century they already appear to have moved further north: but dating is difficult owing to confused genealogies of chiefs and what appears to be a long and complicated period during which they settled at various places as far apart as the arid country to the west of Pietersburg and the mountains in the immediate neighbourhood of Duivelskloof. 1 In this period they extended their boundaries, from their main settlement near Munnik, up to Vendaland in the north, and to Molema's location, Moila and Tswale in the north-east and east; they ruled over the area now under Rakwadu, where they were joined by some Kwena under Toxa; they penetrated deep into Dikxale and Moletše country and were the overlords of the Birwa. This heroic period appears to have culminated in the reigns of Thserane and Kwadu (c. 1790-1830)2. The far-flung boundaries not only arcused enmity which precipitated wars with the Venda and the Moletše and at least envy among the Lobedu, but also raised seroius problems of administration. The Tôkwa proceeded to apply rather advanced ideas of decentralisation.³ We hear of a deliberate division of the tribe by the chief into two sections⁴ and the appointment of near relatives of the chief as headmen⁵ over outlying parts. Whether the large measure of devolution would have succeeded in an environment which favours dispersal and facilitates the growth of new allegiances or independence in the mountains or where access is difficult from the central authority, one can only guess; certain it is that the raids of the maTébêlê (1828) set into motion forces which led to such internal chaos that the Tôkwa are today divided into a number of independent sections.

Moselekatse's raids and periodical exactions, according to the tradition already mentioned, caused a section of *Mmathšaka's* people to flee to *Bokhalaka*. They returned later to *Mabianene* (just north of the Dwars river drift) leaving behind the *Mothšale*. This migration, if connected

¹ Traditions mention an arid or desert country, then Bodupe, where Rakwadu now lives, and later Mowabeni, now Boschkloof (near Munnik), as successive places of settlement.

² These dates are fixed with reference to the rise of the *Pedi* and the raids of Moselekatse, with which *Thserane* and *Kwadu* respectively are connected.

³ The germ exists in the organisation of the village into wards (dikhôrô). At present also there is far more power allowed to district headmen than among the other tribes in the Northern Transvaal; so much so indeed that Manthata.

a relative of and subject to Mmathšaka, is looked upon as independent of Mmathšaka by Europeans.

⁴ The two sections were placed under *Thserane* and *Ramokxopa*, but the latter subjected himself subsequently to *Thserane*.

⁵ For example, Raphathélô to a large area between Groot Spelonken and Molema's locotion, and Ratsaka to territory between Munnik and Groot Spelonken. Their descendants are still in these areas and are regarded as independent.

with the incursion of Thulare from Sckukuniland, must be pushed back to about 1815.¹ A little later (c. 1828) Sekwati, Thulare's successor among the Pedi, came among the Tôkwa, assisted them to evade the Tébélé exactions by retreating into the Woodbush mountains, and joined or instigated by Buys² raided over an extensive area. For the next forty years there is undecipherable confusion in the annals of the Tôkwa: raids by maTêbêlê and Swazi; quarrels among claimants, and murders of heirs, to the throne; internecine and protracted struggles between sections of the tribe; and wars with neighbours and the Boer Republic.³ The result was that the tribe became irrevocably split into the present Mmathšaka and Ramokxopa divisions; and when later there was a recrudescence of trouble between them, the European administration in 1879 decided upon the independence of both.

The Birwa are considered here partly because of the long period of subjection to the Tôkwa, and partly because they fall midway between them and the Lobedu in culture. The Birwa, whose totem is tau (lion) are recent immigrants from a country they call Botau in the north beyond the Xananwa.⁴ Thence they migrated first to Bokhalaka, later to Groot Spelonken, which at the time (c. 1800) was under Tôkwa sovereignty. Very soon after settlement there, the tribe split into three sections. Marua-duna remained at Sekhosésé (Groot Spelonken) with the senior section which is at present under Pheêha; Makxatho broke away towards Mathalere near Munnik; and Pelo-ya-Khomo proceeded to Sethale, north of Groot Spelonken. Many Birwa of Makxatho fled to Sekukuniland with the Tôkwa, as a protection they say against the depredations of the Europeans (the raids of Buys?) Indeed they⁵ suffered considerably in the

¹ This would accord with one tradition which places the exodus to Bokhalaka in Thserane's reign. But we cannot be certain as informants were very confused as to chronological coincidence or sequence.

²C. Buys was a European who left Cape Colony early in the 19th century. He seems to have revelled in the unsettled state of the country, raiding far and wide and a terror to many peaceful tribes. His son fixed his headquarters in the Zoutpansberg and today there is a colony of Buys people near Mara who are half-castes and speak Afrikaans.

³ The *Moletke* took advantage of the situation to avenge their earlier defeat. The Boers fought the *Mmath*aka* section, killing their chief (c. 1845); and portions of the tribe fled to Sekukuniland. In a war of *Ramokxopa's* section with the *Venda*, their chief was killed. There were also wars with the neighbours such as *Tswale* who (c. 1875) attacked *Ramokxopa*.

⁴ There are still some Birwa under Tauyatswala on the Maxalakwena river near the Bechuanaland border. They are said to be a section that was left behind in Bokhalaka when the others moved southward. Other tau in Xananwa country have, according to tradition, more recently left the Birwa (Makvatho's section) after the latter had settled in Tôkwa country.

⁵ We are speaking here of the section under Maknatho, which is the only section we visited.

Tôkwa wars of succession, and in the revenge taken by the Moletše against the Tôkwa. On their return from Sekukuniland they found their country parcelled out to European settlers (c. 1870), but when the Venda repulsed the Boers (c. 1875) they had some respite from persecution. Later they were offered a location but, as it was in Tôkwa country, they refused it, and at present all sections of the Birwa live entirely upon European farms. There are still many Venda, some of the Mbedzi sih, as well as Lobedu, Kom and other headmen among Makxatho's people. They have some interesting cultural and political links with the Lobedu.

THE MOLETŠE AND XANANWA

The Moletše, living immediately to the west of the Tôkwa, like the latter, came from the south. They say they are Kwena from Kxolokwe.2 which they identify with the hills to the south-west of Pretoria. The Moletše are inclined to regard themselves as of Kxatla stock, but mainly on the grounds that all kwena from Kxatla country must be Kxatla. Mmanamêla, their first chief, came via Potgietersrust to Moletlane (Mašasane country) whence they moved to their present country just north of Pietersburg. There they found the baKoni-ba-ha-pitša and also some scattered Venda whom they drove off. This might be dated as about the middle of the eighteenth century.3 A little later with the growth of the Tôkwa power, we learn of the war in which the Tôkwa invaded the country and killed the Moletše chief, Kwinana. In the next reign Moselekatse terrorised the country and many Moletše fled both northwards towards Vendaland and southwards to Pienaars River. Then came Sekwati's raids in the east (1828-1832). The Europeans were soon after on the scene and in one of the recorded fights the Moletše chief Ramanyiba was killed (c. 1840). Finally the Moletše became so thoroughly subjugated

¹ Some of the resemblances might date back to the old common social environment in Bokhalaka, and from this point of view would be of importance in discovering whence the peculiarities of the Lobedu culture complex originated, for instance the ritual suicide of the chief, which is also known among the Birwa. From about 1860 we must, however, remember Makxatho went to Sekhopo for rain. The latter also (c. 1870) helped the Birwa against Mmathiaka, the alliance being cemented by a marriage of Sekhopo to a daughter of Makxatho. But since 1924 relations with Sekhopo have become strained and Makxatho now goes to Modjadji for rain.

² There is a chief Kxòlokwe in Pediland and there are large numbers of maKxolokwe in Basutoland. Of the relationship of these with the Moletše we know nothing. The royal sib also call themselves kwena of Thaloka, some of whom live under Mmalebôxô.

³ The Tôkwa clashed with them after two reigns (Kxabo and Ngako) and only in the next reign, that of Ramanyôba, the ma Têbêle appear in the west (1827-1828).

Allowing for 25 years per reign, we arrive at a date of approximately 1750.

Calculations of this nature are, however, apt to be liable to serious error.

that they unblushingly record their participation in the wars of the Boers against Makxoba (1894), Mmalebôxo (1894) and Ramapulana (1899). Today they have a comparatively large location and are a numerous people. They deny kinship with the Hurutse, have undoubtedly links with the Kxatla, but may be regarded as falling within the same culture complex as the surrounding tribes.

The Xananwa of chief Mmalebôxô are comparatively recent immigrants into the Transvaal. They trace their ancestry to the thswene (baboons) of Malete² and aver an origin from a place they call Theweneng. The totem of the Xananwa is thswene and they are apparently of Hurutse stock.³ Moving northwards from Thsweneng, they settled first at Ntswaletadi (Ntswaletšatši?) becoming subject to the Mangwato. Later they crossed the Limpopo, proceeded to Mohohobe and then occupied the Blaauwherg where they found the tau of Madibana and also some Venda. They have no tradition of Moselekatse's raids; and as up to the present there have been only three Mmalebôxô's, we might assume that they arrived in their present country after the beginning of the third decade of last century. This would also accord with the fact that the first raids they mention are those of Sekwati (c. 1831). They were at first under the nominal sovereignty of Matala, but no doubt easily broke away because of the disturbances and anarchy of that time. During the reign of Mathome (Mmalebôxô II) the tribe split, one section now being ruled by Kibi.⁴ In 1894 the Boers, assisted by most of the surrounding tribes, conquered Mmalebôxô who for long had defied them. Though somewhat distant from the main nuclei of other tribes, and only recent immigrants, the Xananwa fall into the same culture area as the Moletše and Matala.5

¹ The name Kvabo (monkey), the totem of the Kxatla, occurs quite frequently among their chiefs. But only a vestige of the Kxatla ward is found among them. The Moletke are regarded as Sothoised Venda by their neighbours, the Koni of Matala!

² The baxa Malete live partly in Bechuanaland Protectorate (districts of Gaberones and Molepolole) and partly in the Zeerust district of the Transvaal. But they are nare not thswene. There are, however, many nare among the Xananwa such as the Rapanyane and Madepa. These are not the same nare as some Birwa, also nare, under Mmalebôxô.

³ This was confirmed by the Moletše.

⁴ Mmalebôxô I had two children, the first a daughter whose son Mathome succeeded; the second a son who started a quarrel as a result of which the section now under Kibi, a descendant of this son, broke away.

⁵ The Xananwa are fairly numerous but the population is very mixed. Many elements have come from the north, for instance the Birwa the nare of Rapanyane and the Tau. There are also Venda of the Laudzi clan and representatives of all the tribes from the immediate south. There are, for instance, Tôkwa who have bought a farm near Bochem and maintain allegiance to Mmathšaka, though Mmalebôxô claims juridiction over them as being under his territory.

They have links with the north and on at least one occasion have gone to *Modjadji* for rain:¹

THE TONGA INTRUSION

The invasions of the Tonga into the lowveld and their gradual penetration, though in very small numbers, among many tribes of the highveld have been so important in the history of the Sotho that we cannot omit sketching in broad outline some account of their migrations. They came originally in small parties frequently without any recognised chief, at first being confined to the valleys and lowlying country of the Sotho chiefs whose protection they sought. With a background of military organisation, they were more warlike than their Sotho overlords; but while their military training made them formidable opponents, and when allied to leadership as in the north under Albasini² enabled them to wrest territory from the Sotho, their successful penetration of the country resulted from somewhat different qualities. More adaptable and enterprising than the Sotho, they were also, as refugees, less attached to their adopted country. They could readily accept a White man as their leader, and complacently submit themselves to the restrictions of a European administration. The Sotho on the other hand have intensely resented the penetration of the European, and to the overwhelming power of the latter's challenge their only response is a sense of frustration and profound suspicion. These characteristics of the two different peoples have contributed greatly to the relative prestige of the Tonga among Europeans, their liberation from Sotho sovereignty and their acquisition of comparatively large reserves. These reserves have in turn furthered the tendency to reassemble and acted as nuclei for the consolidation of scattered Tonga into powerful tribes, the most important of which being the Nkuna of Muhlava and the Valovi of Nwamitwa.

Without attempting to disentangle the very complicated background and migrations of the *Tonga*, we might note that, despite very similar reactions to European contact, they have very different histories and come from very different stock.³ The *Valoyi* of *Nwamitwa's* location aver that they are of the *Mukansi* branch of the *Valoyi*, the other branches

¹ This does not signify much, though having sent a daughter to *Modjadji*, the latter is called *koko* (grandparent) by *Mmalebôxô* III. The *nare* from *Bokhalaka* were the *badzeta* (messengers) of *Mmalebôxô* II.

² Albasini was a Portuguese who as chief of the *Tonga* round about Spelonken played a considerable part in the history of the *Tonga*.

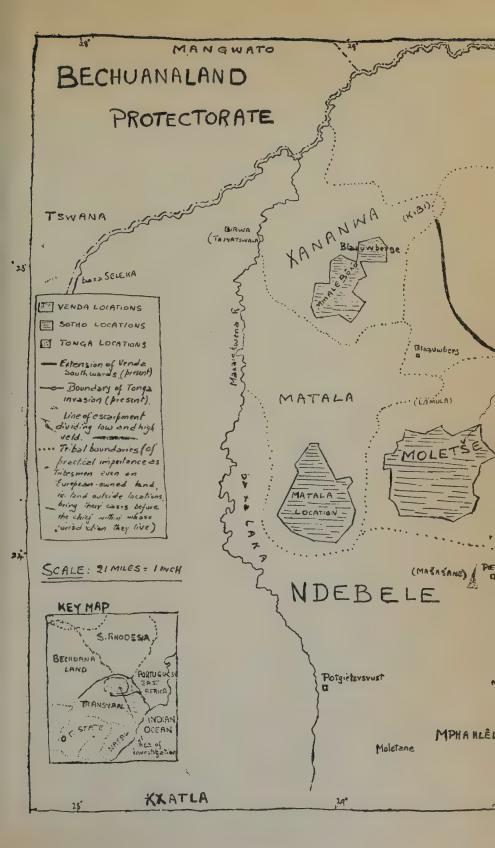
³ We confine our remarks to the Nkuna and Nwamitwa's Valoyi, the only two Tonga tribes we visited.

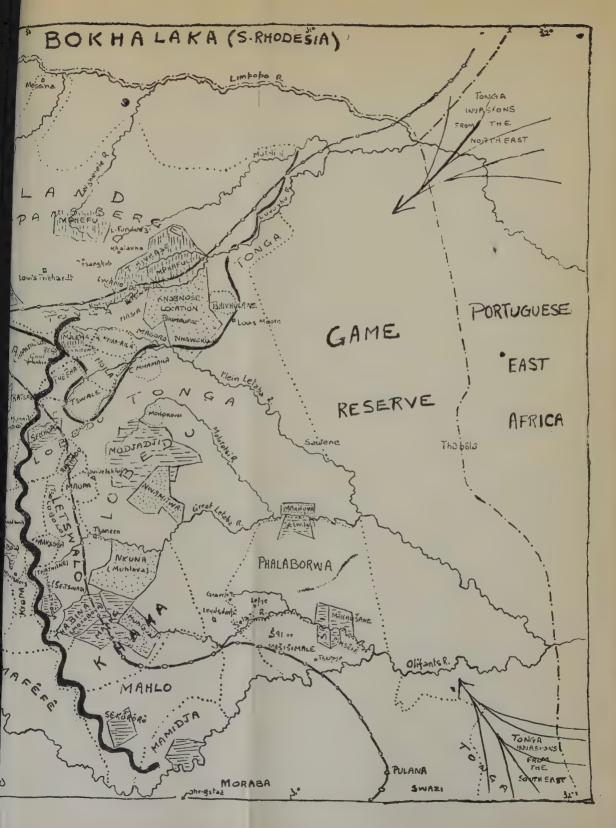
being Sholwani (at Valdezia) and Madzinga. They came originally from Nyai country in Bokhalaka, migrated to, and clashed with the Ngoni of Soshangane in Portuguese East Africa, eventually fleeing (1836-40) to seek the protection of the Lobedu. There they had their own headman, but early this century, when they were given a separate location, many left Bolobedu and became independent. The Nkuna, on the other hand,1 came from Zululand whence they migrated into Portuguese East Africa. Later they came into contact with the Valovi near the confluence of the Limpopo and Olifants rivers.² After Soshangane's invasion, the Nkuna left for the Transvaal. They became subjects of several Sotho chiefs in turn, among others Maake, Modjadji, Mamidja, Sekôrôrô, and Makaepea (Letswalo). Frequently used as the vanguard of the army of the Sotho chief in whose area they lived, the Nkuna constantly changed their allegiance according to a shrewd common sense which served them well when the European appeared on the scene. In spite of the very different ancestries of Valoyi and Nkuna they acquired very similar culture traits in the common environment in Portuguese East Africa, where the Ngoni dominated them. We must also remember that, as refugees in a new country, to whose ranks great numbers of other scattered Tonga flocked, they would tend to uniformity, especially in a hostile social environment, the language and culture of the inhabitants of which were too foreign for ready assimilation.

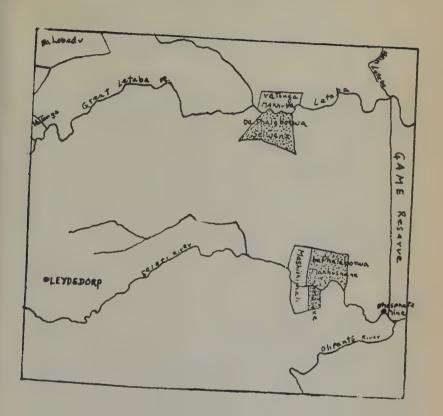
It is not necessary for our purposes to determine how far there has been mutual interpenetration of blood and culture as between Sotho and Tonga, especially in the lowveld. The contempt with which the Sotho regard their more ostentatious and resourceful, if brazen, neighbours the Tonga, had at first militated against ready acceptance even of obviously useful culture elements. The sense of frustration before the European encroachment, engendering indifference to tribal tradition and a helpless bewilderment, has now induced greater receptivity to Tonga culture without much improving the attitude to them. What the future will bring one cannot guess; to all appearance the Tonga are embarking upon a period of progress, seeking and accepting the advice and assistance of Government experts and others, while the Sotho are stagnating and becoming listless. But that may be a phase, for essentially the Sotho are adaptable and have a sound sense of the value of diplomacy. When their suspicious have abated, they will be able once more to take up successfully the challenge of the new conditions of their life.

According to Muhlava who gave the history in great detail and with exceptional lucidity.

² The two peoples were so different then that intermarriage was not permitted.









NOTE ON THE PHALABORWA AND THEIR MORULA COMPLEX¹

By EILEEN JENSEN KRIGE

On the western borders of the Kruger National Park, near the junction of the Selati with the Olifants river, live the Phalaborwa, a people not very numerous but one of the most interesting in the north-eastern Transvaal. Though long renowned among Bantu tribes of the Lowveld as workers in iron and copper, they are but little-known to the European from whose unwelcome attentions they have been spared by the unhealthy and undeveloped nature of their country. The first missionary activities among them began only some twelve years ago when a church and school were established. The Phalaborwa comprise the people of the coterminous Makhushane and Maseke Reserves on the Selati river and those of Selwana's Reserve on the Great Letaba to the north, (see Map) who share with two or three other, unrelated tribes of the Lowveld the dialectic peculiarity of using the for prefix se of the Sotho language.²

In June and July, 1937, my husband and I made a tour of the tribes of the Northern Transvaal, with the primary object of understanding the general setting of Lobedu culture and studying the relations and contacts between the Lobedu and neighbouring tribes. The Phalaborwa showed so many interesting features and are so little known, that I have been tempted to write this note on the more salient aspects of their culture in spite of the inaccuracies and lack of adequate checking of material that a visit of only one week makes inevitable. One of the difficulties confronting the anthropologist in S. Africa is that too little is known of the range of variation to be found among different tribes or tribal clusters. There are many aspects of Bantu culture, such as certain initiation schools and spirit possession, that form, probably, a single culture complex and cannot be fully understood until they have been studied in a number of different tribes in all their various manifestations. But until more is known about the general customs of various tribes, the student does not know where to go for such a study. Obviously it is of advantage to know where, e.g., the byale school still functions fully and where it is all but dead, and very often puzzling features of the special tribe one is studying can be cleared up by a visit to another tribe having similar institutions, if one knows where to find such a tribe. For these general reasons I feel that short notes such as this one on special features of interest in different tribes might be of value in bringing to the notice of those interested in various aspects of primitive sociology the nature of the vast amount of material that still awaits investigation.

² Van Warmelo in his Preliminary Survey of the Bantu Tribes of South Africa calls the Moxoboya people of the Thabina valley also Phalaborwa, but this is incorrect. Both Moxoboya and Phalaborwa deny any relationship whatever, saying that even their common totem nokô does not refer to the same animal, being a hedgehog in the case of the Thabina, a porcupine in that of the Phalaborwa.

Origin and Divisions of the Phalaborwa

The Phalaborwa had their origin in the north (Bokxalaka or Rhodesia), according to three independent accounts given by representative old men, including the rangoane (father's younger brother) of Chief Makhushane. Travelling south in a direction east of their present location but considerably west of the Thonga, they came to rest at the junction of the Letaba and Olifants rivers on the eastern edge of what is to-day the Kruger National Park, from where they gradually spread west to occupy the land between the Letaba and Olifants rivers as far as the vicinity of Gravelotte. They found the country occupied by the Salane, a primitive people without a chief, who did not know the use of fire and whom the Phalaborwa were able easily to scatter and dispossess by setting fire to the bush. Descendants of the Salane are still to be found among the Phalaborwa to-day. An alternative account which I believe to be far less reliable was given by the local teacher, who is the younger brother of Chief Makhushane, and an old man to whom he took us. According to this the Phalaborwa came to their present abode from the south where their relatives the Kxatla still live. Leaving their brothers, the Makau, near Pretoria they moved north, changing their totem from kxabo (monkey) to noko (porcupine) on their way; and on their arrival at their new home they called it Phalaborwa because it excelled (phala) the south (borwa). Several factors combine to make this theory improbable. The two accounts of a southern origin do not agree in detail; the Makau under Chief Alfred Motsepe, whom we visited to verify the story, deny all knowledge of the Phalaborwa; while the two supporters of this theory both have had intimate connections with people in the south. The brother of the chief is a young man who was educated at Kilnerton. near Pretoria and it is possible that his version, although he states it to be that of his father (who also had lived in Sekukuniland for some time). represents an attempt at linking up with the people in the south. The old man who corroborated his story of a southern origin was found on investigation to have lived many years in Sekukuniland, where he married a Pedi woman, a fact which helped to explain a number of similarities to Pedi tradition given in his account of the Phalaborwa.

The present divisions of the Phalaborwa tribe date from the reign of Makegela when the Maseke section hived off and becamed independent. On the death of Makegela his chief son Majaji quarrelled with a younger son Lebatho, who moved a little way off and gave rise to Makushane's section of the Phalaborwa. On the death of Majaji in the beginning of the present century, his sons Madume and Selwana quarrelled. Madume, the rightful heir, after considerable fighting took refuge with

the Tsubye or Shai of Mashishimali, their immediate neighbours to the south, who had trekked north from the Steelpoort river in Sekukuniland and were occupying the land between the Selati and Olifants rivers. Here Madume's descendants live to this day. Selwana, the rival claimant, moved north and established himself on the banks of the Letaba river. The people of Mashishimali, though unrelated to the Phalaborwa, are indistinguishable from them in material culture and so similar in social organisation that this account of Phalaborwa culture can be taken as applying equally to the Tsubye.¹

Effect of Environment on Phalaborwa Food Habits and Daily Life

Though related in social organisation to what one may call the Lobedu complex of Sotho-ised peoples occupying the greater portion of the Lowveld of the N.E. Transvaal, the Phalaborwa exhibit a number of characteristic features worthy of special study. Many of the more typical of these are associated with their environment. The low-lying, unhealthy bushveld which they occupy is an area where the rainfall is most uncertain, crops generally poor and starvation an eventuality to which the people have grown accustomed. Mealies do not thrive, the chief crops being various varieties of kaffir-corn, and the chief green relishes are leaves of the pumpkin and of the Native bean. Even the common Blackjack weed does not grow here. Constant shortage of crops has combined with the unhealthiness of this fever-ridden area to keep the population sparce, for not only is there little incentive to strangers to trek into the country but numbers of the people move away after every drought to seek food in better-watered parts such as Modiadii's country. Some of these return when prospects improve, but many never come back. The great need for grain has led also to a good deal of trade with neighbouring tribes, most important among which are the Mapulana peoples south of the Olifants river who exchange mealies with the Phalaborwa for cattle and to whose influence can be traced the growing use in hut-building of interwoven, horizontal lathes between the perpendicular poles which form the frame-work of all their huts. To-day Europeans also come into this area to exchange mealies for cattle at the rate usually of four to five bags per head.

In the absence of sufficient corn crops and many of those plants which in other areas can be used as green relishes with porridge, the morula nut has assumed very great importance. The morula² as a food

¹The material for this paper was collected in the area on the banks of the Selati. Selwana's location was not visited but we were told that their mode of life was identical.

² Sclerocarva caffra.

and a drink is used extensively all over the Northern Transvaal, but such is its importance in the economic life of the Phalaborwa that theirs may with justice be termed a morula culture. This tree, one of the commonest in the bushveld, provides yellow, plum-like fruits which ripen from the end of January to March just when the supply of corn is running low. Consequently especially in lean years, mokhope, the drink made from this fruit, comes as a welcome addition to the Native diet. This drink, consisting of the juice of the morula fruit to which some water is added, has when newly-made the taste of an ordinary fruit drink, but after a day or two it ferments to form a cider, commonly known to Europeans as morula beer, which has a very high anti-scorbutic value. An analysis of this drink, kindly undertaken by the S.A. Institute for Medical Research showed it to have a "very high vitamin C content, being twice as potent as average orange juice. A Native drinking this beer would only have to consume one oz. per day to keep free from scurvy." In winter the Phalaborwa subsist largely on the nuts found inside the morula pip which may be mixed with spinach, with meat or even, in summer, with green mealies, and can be stamped to form a cake which is eaten alone. These nuts are very nutritious, containing high percentages of protein, fat and carbohydrate¹. The skins of the fruit are used for snuff, being burnt to ashes and mixed with the ground tobacco.

The importance of the morula can be seen by special developments in connection with it here, which are not to be found in other tribes. Phalaborwa have, far example, a special implement known as modukulo for extracting the morula nut from the pip after it has been cracked open between two stones. It consists of a flattened piece of iron or copper, about three inches long and one-third of an inch in width, pointed at one end, bent over at the other to form a loop, which enables it to be worn round the neck, suspended from a piece of plaited string. Women spend days cracking morula pips, just as, in other tribes, they stamp or grind corn for meals, and every woman wears her modukulo. After the nuts have been extracted, they are placed in flat baskets and winnowed to get rid of the dry inner covering of the nuts, after which they may be put in a closed calabash where they will keep fresh for some days. Another peculiar feature of Phalaborwa culture is the hammock-like receptacle made of strings of bark lined with grass and supported by four poles, in which the morula pips are stored. These are to be found in every kraal. Common also are net bags of Native string used for carrying marula fruits, but

An analysis of morula nut kindly given by Dr. Fox of the S. A. Institute for Medical Research is as follows:—

Moisture 5.0 Fats 33.1 Mineral salts 3.4 Magnesium 0.007 Protein 22.1 Carbohydrate and Fibre 36.4 Calcium 0.14 Iron 0.008 Phosphorus 0.69.

these are also found in other areas. Reference to the morula is found even in tribal history. One of the old chiefs was wounded by the raiding Mafefe of Sekukuniland through the carelessness of a follower who gave away his whereabouts by cracking morula pips when the enemy were near, while on another occasion the Tsubye lost a considerable tract of country by delaying to eat morula nuts when they should have gone to meet the Phalaborwa to decide on a boundary.

Niggardly in her supply of crops, nature has tried to make good not alone by a very plentiful supply of morula trees in the Phalaborwa area but also by providing the *modudu* palm¹ which grows profusely along the banks of the Lower Selati and forms a useful food. The inner portion of the fibrous stem of this palm is eaten either raw or cooked; in summer the fruits can be eaten, while in spring, when the sap is rising, wine is made of the juice. Sharpened sticks are stuck into the stem and along these the sap runs to be caught up into a receptacle placed underneath. The juice may be drunk at once or left for a day or two, when it becomes a potent and intoxicating drink.

Though the Phalaborwa are rich in cattle, for the country which they occupy is better suited to stock-raising than agriculture, milk plays a surprisingly small role in their diet, being used (thick or in liquid form) mainly by herd-boys. Nor do these people show any greater readiness to kill their cattle for meat than other Bantu tribes. It would seem that uncertainty in their food supply has tended towards increased carelessness rather than frugality and foresight. When crops are good, as they were last year, people will be so busy converting this abundance into beer that they may not trouble to do their planting when the first rains fall, and as a result of last year's abundance, therefore, most people did not plant till February this year, too late for an adequate harvest. Phalaborwa women are proverbially irregular in their cooking. In theory cooking is done once a day, in the evening, but in practice, in time of plenty when there is beer no less than in times of scarcity, there may be no cooking for days, the children subsisting on palm stems or anything they might find in the veld. A few people even to-day still obtain salt at certain spots in the Lower Selati, Letaba and Makale rivers by the old process of putting the salt-containing earth in large grass-lined filters (called ditjo), into which water is poured to dissolve the salt, caught up in pots placed under the filter and then boiled away. Most people, however, buy their salt at the store which has been put up in the area.2

Probably Phoenix reclinata: wild date palm.

² There is one store in Makhushane's area which supplies the need of three contiguous reserves on the Selati, and one in Selwana's location.

The nights and days in Phalaborwa are so quiet and free from wind, even in winter, that most people sleep outside all the year round, in summer to keep cool and in winter for warmth round the courtyard fires. Consequently the huts are little more than storehouses for people's possessions and few wives have more than one hut. These huts are seldom plastered on the outside and are thatched as frequently with corn stalks, reeds or modudu palm leaves as with grass. All grain is stored above ground in grass baskets, protected from the weather by roughly-built, unplastered huts. Villages are not large, varying in size from three to twenty huts, and their most conspicuous features are the hammock-like stores of morula pips and the large numbers of sleeping mats and wooden plates to be found. In spite of the fact that matches can be obtained in the store, fire-sticks are still to be found in every village and the Phalaborwa are adepts at producing fire in a few minutes.

Iron and Copper Work

Skilled smiths, the Phalaborwa in the old days supplied many of the tribes of the N.E. Transvaal with hoes, spears, arrow-heads and bracelets and neck-rings of iron and copper. To-day, however, little iron forging is done owing, they say, to the fact that people no longer have access to their supplies of raw material. Nevertheless, the large stocks of bows and arrows and the presence of bracelets and other objects of Nativeworked iron and copper still testify to their old craft.¹

Land Tenure

Phalaborwa is one of the few areas in South Africa where, owing to a sparce population, one can see in full swing the old Bantu system of land tenure. There is no allocation of lands except as a formality to newcomers. Land is plentiful and can be taken up at will by anyone, but the initial labour of clearing it is arduous and boundary disputes common. A field once cleared cannot be taken from its owner even in his absence, and for a chief to take away a field from a subject is tantamount to driving him out of his area. 'Freedom to take up new lands without let or hindrance to-day extends even to areas outside the jurisdiction of one's own chief and it is common, for example, for people living under Makhushane to clear and cultivate fields in Mashishimali's location without any previous permission, though the headman of that area might at times require a bag of corn in lieu of the beer which every man living under him brings as

¹ For an interesting account of various types of smelting ovens found in this area, together with a map showing localities in which old workings have been found, see C. M. Schwellnus, "Short Notes on the Palaborwa Smelting Ovens," S.A. J.Sc., Vol. XXXIII, pp. 904—12.

tribute. The rule that no one is to plough before the chief appears to be strictly adhered to, for we heard many complaints that nowadays the chief often delays so long that people are unable to get their crops planted in time.

Other General Features of Phalaborwa Culture

In other aspects of their culture the Phalaborwa approximate to the general culture pattern of the tribes around the Lobedu. Marriage negotiations and ceremonies take an almost identical form, characteristic of which is the fact that cattle are not handed over as so much lobolo but each beast has its special name and function in the long and involved ceremonial that is to bring the two families together and unite the individuals concerned. We find among the Phalaborwa also what may be termed the logical conclusion of the lobolo system, whereby it is possible for a woman who has daughters but no sons to "marry" a girl who will live with and help her mother-in-law in the same way as she would have, had the son been her husband. This girl will have children by a young man of the family of the non-existent husband or by private lovers, and the position will be much the same as if she had had a husband who had died, except that instead of being subject to the man who inherits the widow she is subject to the woman who lobola'd her. Among the Phalaborwa only a woman whose husband is dead can so "marry" a woman, whereas among the Lobedu any woman of means can do so. A further difference that is of interest is the absence of any virginity beast among the Phalaborwa.

Religious usages of the Phalaborwa bear a general resemblance to those of the Lobedu. Beer offerings are the most usual, though a beast may on rare occasions be killed, and the khadi (father's sister or one's own eldest sister) is the priestess who usually officiates and holds an important position in the family. Shrines vary within a general pattern. Makhushane's family shrine consisted of two river stones and a large piece of antheap partially buried in the ground to the right-hand side of the entrance of the chief hut; that of Mashishimali had no visible characteristics, being merely a portion of the courtyard where a piece of antheap and a titikwane bulb had been buried. Ancestors on both the mother's and the father's side are called upon at general offerings, while cattle, goats or even fowls may be given the name of an ancestor and regarded as sacred. Possession by spirits is as common a phenomenon here as among other Lowveld tribes and is associated with special dancing to drums and the heating of tambourines and rattles. Those possessed people who become doctors are the only class of doctor among these tribes that obtains knowledge and guidance direct from the spirits.

With this difference that women do not occupy any political position either as headmen or chiefs, Phalaborwa political organisation approximates to that of the Lobedu, in general principle if not in detail. For the Phalaborwa are a simple society where headmen have no great powers and the chief is able to come into contact with most of his subjects. Phalaborwa is the land of the ordeal, where even to-day people still sometimes decide to settle difficult cases by dipping their hands in boiling, medicated water or throwing shells of a certain fruit into a plate of water to see whether they float towards or away from one another. But here as elsewhere resort is more and more being had to the Shangaan smeller-out, especially in cases of witchcraft. Each party lays down a wager of a certain number of cattle that he is in the right, whereupon they proceed, with a man acting as "the ears of the chief," to a far-away smeller-out. Often they go from one to another until both parties are satisfied. The guilty party is expected to pay his wager.

There is no ritual murder of the chief as in Bolobedu. The chief is, however, the rainmaker of the tribe, who in time of drought is approached with gifts and special dancing by each headman in turn to beg for rain in a manner common among the Lowveld Sotho tribes. The great dithokola or sacred objects of chieftainship in Makhushane's tribe include a spear with head, shaft and imitation attachment all in iron, a very broad-bladed spear with short wooden handle and attachment of Native wire, and a cleverly-wrought all-iron battle-axe. An ostrich egg-shell accompanies the rain charms. Most important of all these objects, however, is the smallest of the four Komana drums (called Nguthwane) which may not be taken out of the chief's hut except on very special occasions and which is so peculiarly bound up with the life of the chief that should he have occasion to flee it must accompany him. It contains some hard object, said to be the head of a child killed when the drum is made. Of the other three less sacred Komana drums, thanka, bohlolo and boretho, the lastmentioned, a fine specimen nearly five feet in height, can be heard within a radius of twenty miles.

Beads do not appear to form part of the sacred paraphernalia of the chief, but they are nevertheless regarded as a valuable link with the ancestors who wore them and capable of enlisting their aid in cases of illness or distress. Within the short time at our disposal we were able to identify the following, though many others, no doubt, are to be found:—the royal blue and bluish-green varieties of what is generally known by its Venda name vhulunga ha madi; yellow opaque canes (Venda mushosh) white canes comparable with the tshifhaba of the Venda; small Indian red opaque canes on translucent green cores (Venda mokuvhibvu); small

white oblates with blue longitudinal stripes; and light translucent blue games similar to thaganwe of Modjadji's people. Of the larger types of old bead we saw large, blue hexagonals with white cores, large blue annulars, large white opaque beads and a large, almost barrel-shaped bead of beautiful powder-blue which I have not before seen. Large and small metal beads of 100 and copper are also found.

The Phalaborwa have all the initiation schools found among other Sotho tribes of the N.E. Lowveld. For girls there is the khoba, a private initiation lasting a week at puberty, and the byale, a public initiation of all the girls of the tribe, lasting about a year. For boys there is circumcision (bodika) followed by the komana at which the boys receive four semicircular cuts on either cheek and are shown the sacred drums, while last comes the boxwera, a school held at the same time as the girls byale, when the boys dance in elaborate grass skirts and are shown what constitutes the wonderful "bird," the greatest mystery of the byale. These "schools" are all so actively pursued that komana and byale lodges are kept as permanent structures near the chief's kraal. The beating of the komana drums, accompanied among the Phalaborwa as elsewhere by the whistling of didaxajane or dajane, whom the initiated believe to be ancestral spirits but who are in reality old men hiding in the bush, plays a very real part in Whereas among many tribes the komana the life of these people. drums hardly function to-day, among the Phalaborwa they are smeared with the first-fruits when the chief loma's (bites) the new green crops, given beer when the spirits are offered the first beer made of the new corn, and played on other joyous occasions when, it seems, the spirits are invited to join in the festivities.1 The real significance of these sacred drums and the komana ritual is an anthropological problem that is still to be solved and Phalaborwa is probably the area in which such a study would vield the most fruitful results.

Phalaborwa initiation schools, komana ritual, their iron industry and diet are all aspects of their culture that well deserve special study; but the area also presents other interesting problems of culture contact, between Pedi and Phalaborwa, Sotho and Shangaan, Bantu and European as well as of the differential acceptance of culture elements, which might explain such curious facts as the almost universal use of the three-legged iron pot for cooking in Phalaborwa, where the European has hardly penetrated, when in tribes living within twenty miles of fair-sized European towns the earthen pot has held its own.

¹ For a short account of certain aspects of the *Komana* found among the Lobedu, where the institution has already fallen into disuse, see Krige, E.J., "Agricultural ceremonies and practices of the Balobedu," *Bantu Studies* 5, 207—237.

Extensive use of the morula is not confined to Phalaborwa; and its economic value in the manufacture of wooden platters, spoons, stamping blocks, milk pails and drums is at least as great as its value as a food. That this value is recognised by the Native is shown by the fact that the morula is a protected tree. In most tribes there is a fine attached to cutting the morula without special permission from headman or chief, and care is always taken to chop down only male trees. Known and used wherever it grows, it is only in the drier areas that the marula assumes importance as a staple food. Hence one finds as one travels west towards the dry regions of the Magalakwena river west of Pietersburg, that the importance of the morula increases. The Hananoa of Blaauwberg and their neighbours, the Matlala, may be said to have an attenuated morula culture; but with storage in pots or on hut verandahs and the complete absence of such things as the modukulo for extracting the nuts, theirs is a morula industry lacking many of the features typical of the Phalaborwa.

(The tour on which material for this article was collected was made possible by a Fellowship from the International Institute of African Languages and Cultures for a study of the Lobedu, which we hereby gratefully acknowledge.)

¹ The morula tree has a wide distribution, not only in the Transvaal and Portuguese East Africa, but also in Swaziland and Zululand and it would be interesting to compare its uses in other areas with those in the Transvaal.

BEADS OF THE WATER

By C. VAN RIET LOWE

In his "Notes on the Bavenda and their Connection with Zimbabwe," Stayt draws attention to the fact that the Venda are not great bead workers and that the common traders' beads are not so popular among them as they are among so many other Bantu-speaking tribes. He adds: "They possess, however, several different varieties of old beads which are of considerable interest; these are greatly prized by their owners on account of their age and rarity and are handed down as heirlooms."

The most important are the *Vhulungu ha Madi* or "Beads of the Water," which Stayt describes as "tiny blue translucent beads, generally only worn by the wives of important men and women of the royal family. These little blue beads are the most highly prized of any and are said to be very, very old, and to have been handed down from generation to generation."

Miss G. Caton-Thompson draws attention to the fact that similar beads were recovered from the basal deposits at Zimbabwe and elsewhere. They figure in two plates and are shown in the coloured frontispiece, Type 4 c. Various specimens appear in the text where the beads are consistently referred to as "transparent blue." In her "General Considerations," Miss Caton-Thompson goes on to say: "The sacred tribal beads need examination by an expert, who can co-ordinate the results; as an archaeologist I would wish to know the present distribution of the little transparent blue cane beads—the 'bead of the water' of the Bavenda. Its past distribution—in basal deposits of the ruins more than a thousand years ago—is proved."

Beck also refers to the "bead of the water" as "4c. Blue, transparent" which he describes as follows: "Small beads from cane mostly cylinders. These include several varieties and in some cases would overlap into 4a (i.e. small beads made from cane, mostly oblate. Colouring matter, copper) if they had rather more corrosion. The colouring of some of these is copper; others have a colour which may be due to cobalt in a dilute form, but I cannot see any trace of the cobalt absorbtion band with a spectroscope. I think it is therefore more likely to be copper combined with another material, possibly iron."

The occurrence of these beads in basal deposits at Zimbabwe and other pre-European ruins in South Africa, coupled with the fact that they may still be found among the Venda makes it particularly important for us to have as complete a record of the beads as possible. With this object in view, I first of all followed Miss Caton-Thompson's advice and enquired into their present distribution. The most careful enquiries show that the Venda of the Zoutpansberg and Pietersburg Districts of the Northern Transvaal, the Lobedu (or vhaLovhedzi as they are called by the Venda) of the Pietersburg and Letaba Districts⁴ also of the Northern Transvaal, and the Pedi of the Lydenburg District in East-Central area of the Transvaal are the only Natives who are known to possess and prize them to-day. They are, however, most highly prized among the Venda who use them in ceremonies connected with ancestor worship. The Lobedu name for these beads is *Modzike*, while the Pedi include them among their *Tgaga* types.

During my enquiries I was most fortunate in making a small collection, a description of which should I feel be placed on record so that we may at least have some standard reference for future work. The beads I have are all from the land of the Venda people and are vouched for by Master Smelter Mathagu, Smith Vhangani (both witch-doctors from Tshakoma) and Smiths Vhulahani (also a witch-doctor) and Magodi from Makula—all in the country of the Venda people. They recognise and classify them in three distinct groups:—

- 1. Vhulungu ha Madi or true "Beads of the Water."
- 2. Vhulungu ha Madi: Luţumbe lwa Madi, i.e. resembling the colour of a certain ground nut (Thumbe) when it is young.
- 3. Vhulungu ha Madi: Mafhe, i.e. of such translucency as is clear and still water: "so clear that the bottom may be seen."

The first group includes beads that range from a very pale blue through greenish-blue to bluish-green. The colour of those of the second is a turquoise blue, while the beads of the third group are the colour of lapis lazuli. All are translucent canes, and ring and cylinder forms occur in almost equal numbers. The glass is not transparent. As a matter of fact, its translucency is one of its distinguishing characteristics. The Natives say they are "cloudy" more on the opaque than on the transparent side—"and," they add, "the cloudiness varies." Speaking of the colour of these beads, Dicke says: "The colour of the Bavenda Vhulungu he. Madi bead ranges through all shades of blue into green and at times, even into grey. The exact colour-shade of the bead does not

seem to matter much to the Natives. What they look for is a cloudy white substance which appears to be floating inside the bead. It is a wax-like cloud which makes the bead semi-opaque. . . . In the most highly valued strings the different shades or hues of blue appear blended as they would on a soap bubble, gradually merging into one another."⁵

The external diameter does not vary much. It fluctuates about 2.5 mm. while in length the beads vary from 1 mm. in the "ring" type to just under 4 mm. in the "cylinder" type. Ends are coplanar and invariably oblique to the longitudinal axis. Beads are carefully selected and threaded to fit so that the effect is one of continuity. Any movement of a strung thread is snake-like. Dicke believes that "the chipping off from the thin tubes was not done wholesale and the beads then strung indiscriminately, but (that) each bead was threaded as it was chipped off its particular tube."

The existence of two colour extremes in the first group induced me to adopt the following classification:—

- V. 1 Vhulungu ha Madi: pale bluish green
- V. 2 Vhulungu ha Madi: pale blue
- V. 3 V. ha M.: Lutumbe lwa Madi: turquoise
- V. 4 V. ha M.: Mafhe: lapis lazuli.

With the consent of Professor W. Gerlach who is in charge of the "Physicalisches Institut" at München, Dr. W. E. Schilz of the University of Pretoria very kindly examined these beads and submitted the following analyses made by means of the "Q.24 Zeiss Ultraviolet Spektrograph":—

	>	Cause	Cu	Cu + (Co)	Cu	Co + (Cu)				
	>	Colour	Green	Light blue	Copper blue (Tur- quoise)	Cobalt blue (Lap- is Lazuli)				
1		Zn	1	1		1				
	IV	Al	1		~	1				ļ
,		Ni		1			In very small quantity			
		ပ္	1	÷		+	ll qua	ntity		ity
		98		-	+++++++++++++++++++++++++++++++++++++++		sma	dna	ear	luant
	III	Sn	÷				very	In clear quantity	Very clear	Great quantity
		Mg Mn Cu Pb	+	1	(+)(+)(+)	1				
		Cu	+ +	+ +	- - -	+	= (+)	ii	1)	H
		Mn	+	+	£	+	(±)	+	++	+.
		Mg	+	+	(+)	+				·
		Fe	+	+	(+)	+	Where:			
		Si	+++	8	86	6.	W			
		Ca	+++	**	r I	*				
	I	K.	+++	33	2	:				
		Na	+++	33	6	*				
	GROUP		V. 1	V. 2	V. 3	4 · . 4				

The V. 1 types are classified by Dr. Schilz as being made of the same glass as the "Garden Rollers" (illustrated as Nos. 13 and 14 in Colour Plate D, facing p. 104 of "Mapungubwe") and small oblate and cane bluish-green beads recovered among funeral furniture in the graves (mainly pot-burials) at Bambandyanalo and Mapungubwe. He attributes slight variations in colour to varying percentages of iron oxides—differences that may also be caused by resmelting, if the glass is stirred with a stick or if a piece of charcoal should inadvertently be admitted into the molten mass.

He groups V.2 and V.4 together; V.2 he says, contains more copper and less cobalt than V.4. This is the cause of colour-difference.

The V.3 beads stand quite apart because they are the only ones that contain antimony. Dr. Schilz emphasises the fact that they do not belong to the same category as do the other Beads of the Water. The percentage of iron, magnesium and manganese is so much less in the V.3 than in the others that much purer materials must obviously have been used in their manufacture. "Thus," adds Dr. Schilz, "I feel the V beads could not have been made in the same place."

As all hitherto published references to these important beads are inadequate, one would like to have seen the original Zimbabwe specimens submitted to a more searching analysis. Unfortunately my attempts to get a few failed but I do feel that we need more data than we have at present as this link between the past and the present is of peculiar significance.

The origin of these beads is also unknown and in publishing this note I would express the hope that those who are able to do so will give such further information as they may be able to.

The only heads that may nowadays be worn with the Madi are the following:—

- (1) Luţumbe: a small vegetable green opaque cane bead, 1.5 to 2.5 mm. long with a diameter of about 2 mm.
- (2) Mushosho: a small Indian-yellow opaque cane, about 2 mm. by 2 mm.
 - (3) Sodzi: a small black opaque cane, about 1.5 by 2 mm.
 - (4) Tshifhaha: a small white opaque cane, about 1.75 by 2 mm.

 0 6 * * * * * *

The small Indian red cane beads on transparent green cores are referred to by the Venda as *Mukuvhibvu*, a term applied to all small opaque Indian-red beads whether oblate, ring-shaped or cylindrical and regardless of the core. Beck's Zimbabwe type 6b. and Mapungubwe type 11a are *Vhulungu ha Mukuvhibvu*. This modern grouping of various Indian-reds is rather unfortunate as small opaque Indian-reds (both oblate and cane) are common throughout the ruins and one would have appreciated distinctions based on shape and/or core.

In conclusion I would like to thank Mr. J. F. Giesekke for his great and expert assistance during my interviews with the Natives, Mrs. Eileen Krige for the beads she sent me from the Lobedu country (Modjadji's Location) and Mr. W. G. Barnard of the Native Affairs Department for generous donations of beads from the Eastern Transvaal. To Professor Leo Fouché I am greatly indebted for the contact he enabled me to establish with Dr. Schilz and I am particularly grateful to Dr. Schilz for his painstaking analyses while he was so busily engaged in analysing a range of beads from Mapungubwe on behalf of the Archaeological Committee of the University of Pretoria. Details of Dr. Schilz's report on these beads will be published in the second volume on Mapungubwe.

REFERENCES

- (1) "Zimbabwe Culture," Caton-Thompson, Oxford 1931, Appendix IV, p. 253.
- (2) "Zimbabwe Culture," p. 194, para. 3 and p. 234.
- (3) "Rhodesian Beads," Appendix 1, pp. 229 and 234 of "Zimbabwe Culture."
- (4) "A Preliminary Survey of the Bantu Tribes of South Africa": N. J. van Warmelo: Government Printer, 1935.
- (5) "The Sacred Bead of the Bavenda. Vhulungu ha Madi—the Bead of the Water," pp. 405-409 in 1st Ed. "The Bush Speaks," Shuter & Shooter, Pietermaritzburg, 1936.
- (6) "Mapungubwe." Ed. by Leo Fouché, Cambridge Univ. Press, 1937.

THE SPELLING OF NAMES OF BANTU LANGUAGES AND TRIBES IN ENGLISH

- 1. The Inter-University Committee for African Studies has deliberated upon the above question and the following memorandum is issued with its general approval. The memorandum was prepared in its original form by Professor G. P. Lestrade who, together with Professor C. M. Doke, formed a sub-committee to deal with the question of the spelling of the names, of Bantu languages only, in Afrikaans as well as in English. It was subsequently decided to treat of the spelling of such names in Afrikaans separately, but to extend the scope of the sub-committee's activities to include the spelling of names of tribes. Professor J. A. Engelbrecht and Dr. N. J. v. Warmelo were added to the sub-committee. The present memorandum therefore is the result of the deliberations upon Professor Lestrade's original memorandum together with the further advice and suggestions of Professors Doke and Engelbrecht and Dr. v. Warmelo.
- 2. The principles upon which the forms have been chosen are similar to those followed by the International Institute of African Languages and Cultures as published in Africa (Vol. VI, No. 4, October, 1933, p. 479). Certain further principles have also been added to these as will be seen below. The main principles followed therefore are:
- (a) Names of languages and tribes are used in their root form only without prefixes, e.g. Zulu, not IsiZulu; Sotho, not SeSotho. These root forms are to be used in naming the individual member of a tribe, the people, the language, and as adjective, e.g. a Sotho, the Sotho, Sotho, a Sotho chief; an old Zulu, four young Zulu, he spoke Zulu, in Zulu history.
- (b) The name by which the people call themselves, their language, etc., is used, not the one given to them by other peoples; e.g. Venda, not Bvesha, Tswetla; Sotho, not Guvhu: Tonga, not Gwamba, Kwapa, etc.
- (c) Where two or more peoples have the same or similar roots in their names these should be distinguished from each other, where necessary, by some appropriate geographical or other indication, e.g. the various Tonga peoples and their languages should be distinguished as Nyasa Tonga, Zambezi Tonga, Inhambane Tonga, Shangana-Tonga.
- (d) The spelling should approximate as closely as possible to the spelling of the stem of the name in the respective language itself, provided

(i) that such spelling does not do too much violence to the spelling-canons of English, and (ii) that such spelling does not give rise to fundamental doubt as to the approximate nature of the sound of the name in the language itself. Further (iii) any changes made in any hitherto generally-accepted spelling of such names should, if possible, not depart too drastically from such traditional spellings.

It is realised that the above considerations may to some extent contradict each other, and it is urged that the spelling of each individual name should be determined upon the relative merits of the various claims existing in each case.

- (e) Only names of tribes and languages are considered here and names of sub-tribes and dialects are omitted. It is suggested that such latter names, which are only likely to occur in technical literature, be spelt as they are spelt in the relative language.
- 3. As instances of the concrete application of the above-mentioned principles we offer the list which follows below:

A. S.A. Bantu Languages

1. Nguni Group:

Xhosa.

Zulu.

Swazi.

Ndebele: Rhodesian Ndebele,

Transvaal Nguni-Ndebele, Transvaal Sotho-Ndebele.

2. Sotho Group:

Tswana.

Northern Sotho.

Southern Sotho.

Kololo.

3. Shangana-Tonga Group:

Northern Shangana-Tonga or Tswa. Central Shangana-Tonga or Gwamba. Southern Shangana-Tonga or Ronga.

4, Venda Group.

5. Shona Group:

Karanga. Zezuru. Manyika. Ndau. Kalanga. Korekore.

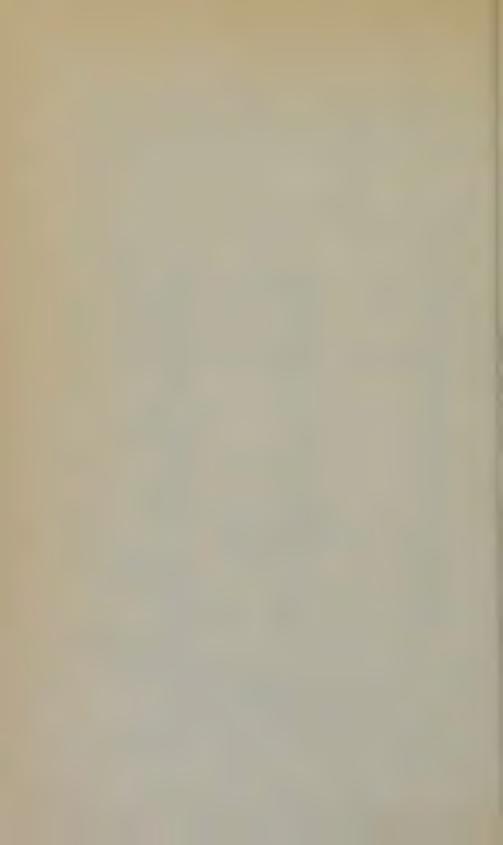
B. Some non-S.A. Bantu Languages

Asu Namwanga Congo Kele Bemba Gabun Kele Ndonga Bena Kikiyu Ngala Konde Nsenga Benga Bira Kongo Nyamwezi Nyanja Chaga Konjo Nyika Chokwe Kuba Nyoro Chopi Kwanyama Pende Kwese Duala Pokomo Lamba Fang Ruanda Fiote Lenge Sena Ganda Luba Lulua Shambala Giryama Kalunda Lunda Soga Gisu Kambove Lunda Songe Gogo Makau Sukuma Hanga Swahili Mambwe Haya Manda Taita Herero Bihé Mbundu Taveta Hunde

IlaCoast MbunduInhambane TongaKakwaMeruNyasa TongaKambaMongoZambezi Tonga

Kaonde Mpoto Yao Mukuni Zigula

G. P. LESTRADE.



CORRESPONDENCE

The Editor, Bantu Studies.

Dear Sir,

REF. BANTU STUDIES, VOL. X, No. 1. P. 9.
"NOTES FOR A GRAMMAR OF THE KURIA LANGUAGE."

While studying in Johannesburg in 1935 I was struck by the similarity of Nyoro to Lamba, and in fact found that it seemed to possess a clearly observable affinity not only with the lacustrine Bantu languages of Lake Victoria but with the great majority of northern Bantu tongues, and worked its way quite clearly down the back-bone of Africa.

As a point of interest I have had an interlinear translation of the Rabbit and Elephant story made in Nyoro which provides a most interesting comparison with the Kuria version given on p. 27 of Vol. X, No. 1.

With reference to the notes accompanying the text the following points are of interest.

The phonetical notes given on pp. 10 and 11 can mutatis mutandis be nearly all transferred to Nyoro, but with the difference that "mpumbafu" becomes "mutumbavu" and although Swahili "Kupa" becomes "okuha," "okupima" still exists in Nyoro for "to measure." Both "omuliro" and "omurro" exist for fire, though the latter is the more correct Nyoro form, and "omuliro" is likely to be a Ganda intrusion.

The instances of Dahl's law and the assimilation given at the foot of p. 11 would not apply in Nyoro. With reference to the Noun Classes these are extremely similar but Nyoro does not differentiate between singular and plural in 9 and 10 and the interesting word "Okwezi-Amezi = a month—months" apparently does not appear in Kuria.

On the foot of p. 13 a reference is made to methods of comparison and in Nyoro "Kira" and "singa" are used as in Kuria.

P. 16. The Reflexive is "i" in Kuria and "e" in Nyoro. The Pronouns present many similarities in the two languages and the tables given on pp. 16 and 17 would appear in Nyoro as:—

I	Nyowe	My	-ange -awe	
Thou	Iwe	Thy		

He, she	Uwe	His, her	-ye
We	Itwe, -ichwe	Our	-aitu
You	Inywe	Your	-anyu
They	Bo	Their	-abo

P. 19. The Verb.

(1) The formation with the tense prefix -la- exists in Nyoro but conveys only the future tense mentioned on p. 20. The form which Sillery mentions as a ni- form is found in Nyoro, not as a future, but as a continuous present, e.g., "Nintera=I am beating" in contrast to the Indefinite present "ntera=I beat."

P. 20.

(2) The Kuria form made up of the infinitive without the initial vowel followed by the -li form of the present indicative of the verb to be, is a most interesting reversal of the Nyoro -ruku- tense (which I remember also exists in Lamba). But this tense in Nyoro has a relative significance, e.g. "Arukugenda = he who is going."

(It is obvious that " ali kugenda" has been assimilated into its present form by the influence of -ku.)

In Nyoro there is another relative tense formed by the personal pronoun, the suffix -nya-, and the infinitive less the initial vowel, thus:— "Anyakugenda=he who goes."

- (3) The -li- form of Distant Future exists in Nyoro for action contemplated generally at a more distant time than the day on which one is speaking.
- (4) The past tense mentioned on p. 20 is used in Nyoro as the narrative tense with the difference that there is no change from "a" to "o" after "w" preceded by a consonant.
 - (5) The Perfect Mood in "-ire" or "-ere" is the same in Nyoro.
- (6) The Narrative Past in Kuria with the prefix -ka forms the Past Tense in Nyoro.

It is interesting that these tenses appear to have exchanged functions in the two languages. Pp. 22 and 23 contain considerable differences of form and the invariable negative particle "nte" is not found in Nyoro. Incidentally it is interestingly like the negative formation with the particle "pe" in the Lwoo languages and perhaps provides a noteworthy link between the so-called Nilotic and Bantu languages,

The Verb " To Be "

Is in Nyoro Okuba, its Perfect is "Mbaire" or "Nabaire."

P. 26. I should be interested to know which form is in use in Kuria for "I have it," whether the Nyoro "Nyina-kyo" or the Ganda "N-ki-lina." P. 27. The list of Adverbs is astonishingly similar. These notes sketchy as they are, serve to show how it is possible to relate the Kuria to Nyoro which was the language of the huge Central African kingdom of Bunyoro-Kitara. I have been able to trace an equally pronounced resemblance with other lake-side languages in this part as well as Chi-Bemba of the Haut-Katanga and other Belgian Congo Languages.

Father J. P. Crazzolara's great acticle on the Lwoo peoples and their southern migrations and formation of the Bacwezi and Babiito dynasties among the People of Bunyoro-Kitara, which appeared in the *Uganda Journal*, Vol. V, No. 1, for July last, is a further stimulant towards the tracing of the connection of the Lwoo and Nyoro cluster of Bantu languages.

Yours sincerely,

Education Department, Makerere, Uganda, September, 1937. R. A. SNOXALL.

EXAMPLE OF KURIA, AND RUNYORO

		obusan	i^3	with n'4 n'	
It and went				ear	
kikagya ⁶			Ru°	kutwi ⁹	
kakagya	kabyama		nu	kutu	
t and went	it eats	e	eleusine	its	
kikagya	kikalya1	1 0	buri	bwoyo	
kakagya	kalya	C	buro	bwayo	
and put sto	ne	to	ear	its	
	gina ¹⁴	ku	kutwi	kwoyo	
		mu	kutu	kwayo	
	kyakolana kakakora It and went kikagya ⁶ kakagya t and went kikagya kakagya and put sto katula ¹³ eli	It and went it sleep kikagya ⁶ kikalala kakagya kabyama t and went it eats kikagya kikalya ¹ kakagya kalya and put stone katula ¹³ eligina ¹⁴	kyakolana² obusan kakakora omugan It and went it sleeps the kakagya kabyama na tand went it eats the kakagya kalya¹¹ obakagya kalya obakagya oba	kyakolana² obusani³ kakakora omuganjano It and went it sleeps to kikagya6 kikalala7 ku6 kakagya kabyama mu It and went it eats eleusine kikagya kikalya11 oburi kakagya kalya oburo Ind put stone to ear katula13 eligina14 ku kutwi	

with rope.
n'orusiri.
n'omuguha.

when hano ¹⁵ obu	10 ¹⁵ Inchogu		shook yasingisya ¹⁶ yatengeseze		ear okutwi okutu		he and thought akakana ¹⁷ yatekereza		
Brer Rab	bit it	it slept		in ,		eas	is	stone	
Kituchu		iraye ¹⁸	mo^1	.9	kana²	20	ni^{21}	ligina	
Akame	k	akarara	mu		kunu		ni	ibale	
he put		to		ear		whe	n (here)	and returned	
atur-re ²²		ku		kutwi		hano		kalinga ²³	
ataire		mu		kutu		obu	(hanu)	kagarukire	
he went	h	e sleeps	to	e	ar	to	comple	ete it dawns	
agya		kalala	ku	kutwi		kusokya		bukukya ²⁴	
kagya	k	arara	mu	k	utu	kı	ıhikya	bukire	
he him s	said to		" I dı	reamt	t	hus	eleus	ine your	
amubur-r	$-a^{25}$			$tire^{26}$	· i	ga ²⁷	oburi	bwao	
kakagiga	mbira	,	" Ndo	osire	1	ıgu	oburo	bwawe	
it was ea		Elepl	hant		it a	and to	ok up	rope	
buleywe."		Inchogu				imukya ²⁹		orusiri ³⁰	
bulirwe.''		Enjoj	o		eka	imuky	a	omuguha	
to go		to snar		planta		thus		"Let me snare	
kugya		kutega ³¹		mugundu ³²		iga		" Ntege	
kugya		kutega		rugonjo		ngu		" Ntege	
animal		that		it eats		eleusine		mine."	
intyeni ³³		iyo^{34} .		ikunera ³⁵		oburi		bwone."	
ekisoro		eki		ekirya		obur	0	bwange."	
When (here)		it comes		night		now		Brer Rabbit	
hano		bukuhika ³⁶		obutiku ³⁷		bono ³⁸		Kituchu	
obu (hanu)		bukuhika		ekiro		bunu		Akame	
it and went		to eat		eleusine		it and got		itself caught	
kikagya		kulya		obur i		ki	kagwotil	bwa ³⁹	
kakagya		kulya		obur	o	ka	kakwati	wa	

The Editor, Bantu Studies.

REF. BANTU STUDIES, VOL. XI, No. 1., P. 37
"SOME REFLECTIONS ON BEMBA GEOMETRIC
DECORATIVE ART"

Dear Sir,

It has been pointed out to me that a sentence on page 41 in my article "Some Reflections on Bemba Geometric Decorative Art" in your March 1937 issue might convey a totally wrong idea. The sentence reads—"although he may be a grown man and a pure Mumbema if he has not been through the puberty rites in the eyes of the villagers he is still a youth."

This might convey the impression that Bemba youths have to pass through an initiation ceremony.

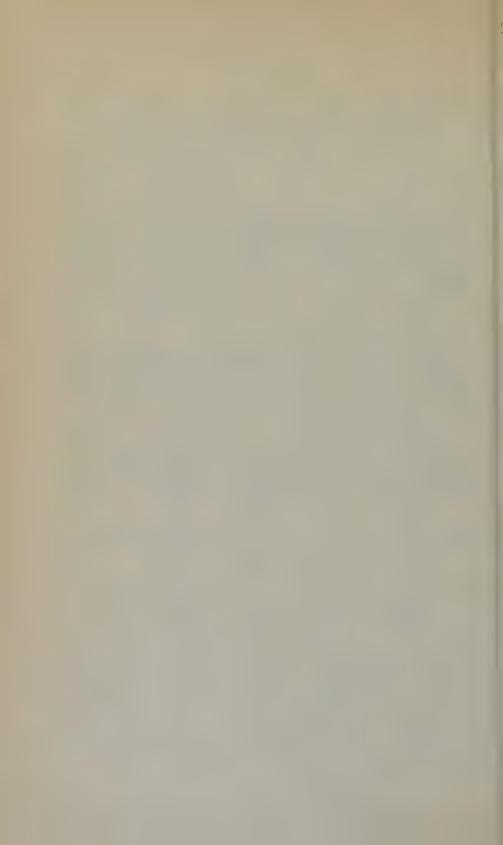
I would like to correct this impression and to emphasise that the Chisungu rites practised in north-eastern Rhodesia are for girls only and that the youth only enters into the ritual as a bridegroom to take part in the final acts of his affianced bride's initiation. Some of these acts have been mentioned in the article.

The article was not a discourse on the puberty rites and the descriptions given of parts of such ceremonies were only incidental to the explanations of certain designs. However I am anxious to correct any wrong impression that I might have caused.

Yours truly,

July, 1937.

VERNON BRELSFORD.



BOOK REVIEWS

Africana, Transactions of the Section of African Languages, Marr Institute of Language and Mentality of the Academy of Sciences of the U.S.S.R. Vol. I, 198 pp. 1937.

Zulu Izinganekwane, translated into Russian by I. L. Sneguireff, and profusely illustrated, 248 pp. Moscow & Leningrad. 1937.

These two publications are eloquent testimony to the serious interest being taken by the Marr Institute of Language and Mentality, Leningrad, Russia, in the study of African languages. In this, Professor Sneguireff is responsible chiefly for the interest in the Bantu languages.

Africana I is the first number of the transactions to deal exclusively with African languages, and promises to be the first of a periodic publication. The articles are in Russian followed in several instances by a summary in English. I. L. Sneguireff has contributed an introductory article on "N. J. Marr and the Study of African Languages," a short one dealing with "Revolutionary Songs of the South African Workers," and a most interesting study in Bantuization of European terms, entitled "Modern Economic and Social Terminology in the Zulu, Xosa and Suto Languages." The writer's material is mainly gleaned from the Communist Native paper Umsebenzi, and is intended to "reflect the process of the social development of Zulu, Xosa and Suto societies." He points out how new social relations have brought in new vocabulary borrowed from English and Afrikaans; he then deals with considerable detail, which is of definite interest to us in dictionary preparation work to-day; and discusses the stages of borrowing, first their inclusion with foreign pronunciation and then their full phonetic and morphological absorption in the language. In summing up his discussion upon political terms the writer expresses himself as far from satisfied with the inadequate way in which these are represented in the press, and voices his opinion that "the press is faced with the tremendous task of culturally raising and politically educating the masses!"

N. V. Yushmanov contributes two articles dealing with phonetic problems, viz. "Phonetic Parallels between the African and the Japhetic Languages," in which he draws considerably upon Zulu and Shona for his African material; and "A Sibilant Anomaly in the Tigrina Numerals."

A considerable section is devoted to "Book Reviews," and the journal ends with "The Bibliography of African Languages" Part III,

Section I, The South-eastern Bantu, the material for which has been mainly drawn from the Bibliographies which appeared in *Bantu Studies* Vol. VII, No. 1. in 1933, and was reviewed in Russian in another publication of the transactions of the Marr Institute in 1935. The plan of the series is to publish a complete Bibliography in four parts (i) Bushman and Pygmy, (2) Sudanic, (3) Bantu and (4) Hamitic.

The second publication under review is a remarkable book. It is the first translation from Bantu into Russian, being Callaway's "Nursery Tales of the Zulus" which appeared in parts from 1866-1868 in parallel columns of Zulu and English. We do not know of its having been translated into any other European language, and we must congratulate Professor Sneguireff on his choice of a text for translation into Russian. These Zulu folk tales have a strong appeal. The book is most charmingly illustrated both with line blocks and full-page colour plates prepared in a very striking manner. Discussing these with Mr. B. W. Vilakazi we were both of the opinion that the style of the illustrations was definitely Bushman and not Bantu—that does not however detract from their appeal. We do not know whether it is intended to issue other translations of Bantu Folk-lore in Russian, but this book is certainly unique of its kind.

C.M.D.

Race Attitudes in South Africa: Historical Experimental and Psychological Studies, by I. D. MacCrone. Oxford University Press for the University of the Witwatersrand. Pp. xiv + 328. 1937.

Professor MacCrone's book is a study of the origin, development and distribution in the White population of South Africa of what is commonly called race or colour prejudice. He is concerned mainly with the attitude of the White man to the Black or Coloured population, but he includes as an essential part of his investigation an analysis of the attitude adopted by his subjects to all the main race and language groups in the country.

The book falls into three parts. The first and longest is historical, and from the landing of van Riebeeck to the end of the XVIIIth century it traces the hardening of the attitude of the European to the Coloured man. The chief factors in the situation are plainly shown and the problem is set in the context of the general history of the country. The author makes clear how dark skin-colour came to be associated with an inferior or servile status in the community and became separated from the other marks which originally accompanied it, such as lack of civilization or non-Christian habit and belief. Throughout, the discussion is

based on original sources and may be commended as a genuine contribution to the social history of the period.

It is doubtful, however, whether the author was altogether welladvised in breaking off at the end of the XVIIIth century. He contends. indeed, that "the attitudes themselves, as they existed at the end of the eighteenth and the beginning of the nineteenth centuries are very similar to those which we find displayed on all sides at the present time." And he adds that "the attitudes remain the same though they may be differently rationalized." But, granting this, we have to explain the persistence of the attitudes and their extension to fresh groups with a different background and a different historical origin. A continuation of Professor MacCrone's account, showing how the factors operative at the end of his period have continued to act and permeate modern society, is highly desirable. Of course, as the author realises, this would bring us into current politics and would involve an analysis of the way in which existing European groups are constituted and of the bonds by which their unity is secured. But such an inquiry can be made in a scientific and "factfinding" spirit. On the other hand it may be unreasonable to ask it from Professor MacCrone, for adequately undertaken it would more than fill the remainder of his space.

The second part of the book is labelled "experimental," and it gives the results of an investigation into the race attitudes of students of the Witwatersrand, of Grahamstown, and of Potchefstroom. The inquiry consists of two parts: first, a scale for measuring attitudes towards the Native, and second, a questionnaire regarding the social distance between each subject studied and the major groups in the total population, including the group to which he himself belongs. In constructing the scales the author has taken advantage of the latest techniques and has dealt fairly with the problems of measurement involved. The results obtained are of great interest and importance, and they give information of a scientific nature not available before. One criticism of the presentation here, however, may be made. In the curves of social distance on pages 200-205 the author separates tolerance and intolerance, and in his discussion later some use is made of the distinction. But the division is arbitrary, depending simply on the manner in which the scores were assigned; and it would probably have been better if the graphs had shown the average scores continuously above and below the mid-line chosen as the neutral value. By employing Watson's Test of Public Opinion the author shows that the differences in the attitude to the Native are not rpima facie due to differences in "fair-mindedness" in the ordinary sense of the term but are more deeply seated and require more profound analysis.

Unfortunately the statistical chapter—in some ways the most important one-—although it presents much valuable information, is not fully adequate. Inter alia, the author makes use of the tetrad equation criterion devised by Professor Spearman, but he does not apply it with sufficient rigour. He declares, for example, that it is satisfied by table XXIX. But, if we accept his own figure for the probable error, viz., 0.024, the table does not satisfy the criterion, for the median tetrad difference, viz., 0.052, is more than twice what it should be, and moreover four of the other differences are so large that one of them alone would be a sufficient supply for a hundred cases instead of for the fifteen in which they are found. Similarly in table XXX the criterion is again not satisfied, the results being inferior to those of table XXXI which the author himself regards as falling below the required standard. In table XXXII the author points out one value transcending the allowed limits, but even if it were altered or removed there are others which also present difficulty. In the light of this weakness in the treatment it is difficult to know what reliance can be placed on the sets of groups on pages 223-7 for which no figures are given. On these grounds the analysis contained in tables XXXVI-XL remains of doubtful value and will require considerable confirmation before it can be accepted. At the same time, this criticism must not be allowed to obscure the fact that the inquiry itself has been carefully performed and presents new and useful data.

Part III is a psychological or psycho-analytic study of the principles underlying race prejudice. Some of the treatment is based on the orthodox Freudian creed and must stand or fall with it. No attempt is made in the book to prove the validity of the stand-point and no discussion of it can be undertaken here. It may be remarked, however, that the author does not exploit the ordinary psychology of learning as fully as he might and in his criticism on pages 245-6 is apt to make his task a little easier by identifying learning with "conditioning" and treating the behaviourist as the only alternative to the psycho-analyst. Nevertheless there is some good matter in this section even for those who lack the psycho-analytic faith, and in particular the statement of the functions served by the group attitudes towards the Native is very much to the point.

As a whole the book is a valuable contribution to the problem with which it deals and, in spite of its defects and its contentious phases, it is the most outstanding work up to the present in its field.

H. A. REYBURN.

Izimpi zendlela yomkrestu, by J. S. Mpanza. Lovedale Press, pp. 55. 1937, 10d.

This is a remarkable devotional book in Zulu written by a converted murderer in Pretoria Gaol, its main theme being the necessity for the "new birth"—Umuntu angazalwa ngokusha. Exemplary conduct has gained for the author an unconditional release, and he is now a respected member of Orlando township, Johannesburg. This little book was prepared for the press by E. S. Msimang, and is printed in the new orthography, which however is marred by inconsistencies and careless transcription.

C.M.D.

Africa and Christianity, by Dr. Westermann. Oxford University Press, pp. 221, 1937, 5/-.

This publication embodies the Duff Lectures delivered by Dr. Westermann in 1935, and constitutes a concise survey of Africa and African conditions under the influence of Christian Missions and Christian influence. Dr. Westermann gives it as his verdict that the Church in Africa is being built on solid ground. "It has given sufficient proofs that it is rooted in the people, and it has grown to become one of the powers destined to reshape African life.

The book contains six chapters:

- (1) Old and New Ideals, in which it is maintained that the African is capable of assimilating Western civilization, and in which the goal of education in Africa is discussed.
- (2) Africa under European control, in which the relations between Missionary, Native and Government official are reviewed. In many parts Missionaries are considered as a useful instrument for assimilating the Natives to the European mother country, and are therefore welcome insofar as they serve this purpose.
- (3) The Religious Heritage. This is a very valuable chapter, in which the author makes some very pertinent observations. Discussing the destruction of Native religion, he observes, "However anxious a missionary may be to appreciate and to retain indigenous social and moral values, in the case of religion he has to be ruthless". . . . nevertheless "He cannot expect the Natives to understand and appreciate his religion if he does not understand and appreciate theirs." "It is a remarkable fact that African Christians will insist on having not only the New Testament but also the Old translated into their own language."

- (4) Christianity in Competition. This is a powerful chapter, in which the influence of Islam in Africa, of modern European civilization and of indigenous beliefs are in turn considered. The menace of the spread of Islam is not considered as great as some recent writers have maintained. "Christianity is the religion of the White man, is therefore associated with everything that means progress, and is eagerly sought after by the African." Nevertheless "justification of the use of the term 'Christian civilization' has become questionable;" for "modern European civilization is not Christian," and the modern world is suffering from a flood of secularism in which "the day intended to be the heart of Christian community life is losing its religious significance in a secularized world."
- (5) Mission and Church. Among other things the author bears this witness: "In the course of nearly forty years the author has had opportunities of coming into intimate and prolonged contact with a large number of Africans of whom he has become convinced that their life has undergone deep changes through the fact that they are Christians."
- (6) Christian Literature, the burden of which is the clamant need for an increased production.

This book should prove of great value to all serious students of matters concerning the welfare of the African peoples.

C.M.D.

Practical Suggestions for the Learning of an African language in the Field, by I. C. Ward. Supplement to Africa, Vol. 10, No. 2. Oxford University Press, pp. 39, 1937, 1/-.

This is a reprint of the article written by Dr. Ward for the journal of the International Institute of African Languages and Cultures. It contains most valuable practical suggestions regarding the application of modern methods and modern information in the learning of an African Language. The acquiring of correct pronunciation, fluency in speech and an appreciation in correct use of tones is helpfully discussed, and apart from definite advice as to how to proceed the right emphasis is placed on the acquiring of habit in using phrases and sentences in the new language. The work is warmly recommended to all who are in a position of tackling a foreign language in Africa.

Hospital Planning, Management and Organisation, by Dr. Lewis S. Robertson, M.B., Ch.B., D.Ph., (being a report on a visit to Overseas Hospitals under the auspices of the Carnegie Corporation Visitors' Grants Committee). (Carnegie Corporation Visitors' Grants Committee, Box, 392, Pretoria, 1/-).

Dr. Lewis Robertson in this interesting booklet, deals entirely with visits to and the organisation of large and fully equipped hospitals such as are only found in a few centres in South Africa. The hospitals in South Africa which especially undertake the nursing of Bantu patients and the training of Bantu nurses are often rural and have such insufficient funds at their disposal that much of the organisation and equipment indicated as desirable cannot be obtained. Nevertheless, such hospitals play a great part in the fight for Health in South Africa and certain general principles of interest to them emerge from Dr. Robertson's report. Those of most interest in the organisation of the above-mentioned hospital services are:—

- 1. Efficiency is sustained by understanding, consultation and co-operation between managing boards, medical nursing and administrative staff.
- 2. Full and accurate records of cases are the essence of thorough understanding of cases and of sympathetic understanding.
- 3. General instructions and methods should be available in writing. All orders and instructions should be recorded.
- 4. "The administration of the Department of Nursing has two fundamental phases
 - (a) The actual nursing of the sick;
 - (b) The teaching of student nurses.

The matron and her assistants cannot function to the fullest extent unless they are co-sharers in the training of the student nurses."

- "The nursing proceedures taught in the nursing school are the proceedures practised in the wards."
- 5. Dietary and service of food are very carefully controlled and supervised and economy along with efficiency in this department is essential.
- 6. Social service and follow-up work are an essential if the internal services of the hospital are to be of maximum value.

7. "It (the hospital) should be the source of general health know-ledge to the Community. By health instruction to patients in the wards or in the out-patient departments, by establishing facilities to meet community needs, by co-operation with public health services and by the influence of the nursing staff much health truth can be disseminated."

E.B.J.

Native Administration in Nigeria, by Margery Perham. (Oxford University Press: Humphrey Milford). 17s. 6d. net.

Law and Authority in a Nigerian Tribe, by C. K. Meek. (Oxford University Press: Humphrey Milford). 17s. 6d. net.

Nigeria has for many years been looked upon as the model for what is now generally known as "the system of indirect rule." By this is meant the utilisation of indigenous political institutions in local self-government. This system of administration, previously adopted in other colonial territories outside Africa, notably Java, was in Africa first given practical and theoretical shape by Lord Lugard in Nigeria. It has since come to be regarded as the outstanding contribut on made by Great Britain to the problem of administering subject terretories in which the bulk of the population belongs to what we call "the backward races." Its theoretical principles are fully described in Lord Lugard's famous study, The Dual Mandate in British Tropical Africa, and have also been the subject of many other books and papers by enthusiasts and critics. Hitherto, however, there has been no considered discussion of the system as it actually works in practice. This gap Miss Perham has attempted to fill in her book.

It may be said at once that in many respects the book is one of the most important ever written on African systems of administration. The arrangement is on the whole admirable. Beginning with several historical chapters showing how and why indirect rule was introduced in Nigeria, Miss Perham proceeds to discuss in detail several different types of local self-governing institutions in both Northern and Southern Nigeria. It is in these discussions that most of the value of her book lies. She describes lucidly not only the formal structure of these institutions, but also the various difficulties encountered in attempting to make them run successfully. Foremost among these difficulties, especially in the Southern Province, has been to find Native authorities possessing both the requisite traditional powers, and sufficient size and stability to stand up to modern conditions. Here, as Miss Perham emphatically and continually reminds us, the work of the anthropologist has been indispensable. One good illustration is provided by the account of the aba riots among the Ibo of

South-Eastern Nigeria, riots due very largely to administrative steps taken in ignorance of the true structure of Native society. In consequence of these riots a belated anthropological survey was made, and the information thus obtained necessitated considerable reorganisation of the form of administration. It is almost certain, as Miss Perham herself indicates. that if the anthropological survey had preceded administrative action, the riots would not have taken place. Another grave problem, which does not seem to have been solved as yet, is the relationship between the local authority and the central government, i.e., between the Natives running the local governments and the Europeans responsible for the administration of the territory as a whole. Of the many forced departures from the pure principles of indirect rule, and of the many difficulties incurred in settling the relative jurisdictions of Native and European courts and in the allocation of funds for public works, Miss Perham quotes many examples, showing that indirect rule is in practice by no means as easy as it sounds in principle or as successful as has been claimed by enthusiastic partisans.

Miss Perham herself, however, does not pay sufficient attention to one or two other elements in the situation. She does not, for instance, discuss the relationship of the Native authority to his own people as fully as she discusses his relationship to the central administration. If we may judge from other parts of Africa, one of the major difficulties in utilising Native chiefs and headmen has been precisely that they no longer play the same part in the life of their people as they formerly did, and that even under indirect rule they are in the last analysis merely Government servants and therefore responsible to a new authority replacing the traditional sanctions by which a tribe formerly checked the autocracy or inefficiency of its rulers. There is also the question of the educated African, who is becoming increasingly critical of his traditional superiors and more anxious to share in the control of tribal affairs. All this suggests that such African administrations as Nigeria will inevitably be confronted with the problems arising from utilising hereditary institutions rather than those based on some principle of democratic representation, problems to which Miss Perham does not appear to devote sufficient consideration. She also does not appear to go fully enough into the general question of the ultimate end towards which indirect rule is supposed to lead. As visualised by the Joint Committee on Closer Union in East Africa, the logical outcome of local self-government is the ultimate participation of the African in the central government; and it would have been instructive to have Miss Perham's comments on this in the light of Nigerian experience.

In one respect at least Nigeria has given a lead to most other African administrations. We have already referred to the practical recognition given in that territory to the work of the anthropologist. Dr. Meek, until recently Anthropological Officer to the Nigeria Administration, has in his various publications on the tribes of the Northern Province shown just how valuable such work can be in providing data upon which the Administration must proceed in building up "Native authorities." His present book, unlike its predecessors, is devoted to Southern Nigeria, and is in fact the direct outcome of the aba riots referred to above. "As soon as the riots had subsided, the Government proceeded to retrieve the position by embarking on an intensive campaign of inquiry into the indigenous social and political organisation of the peoples of South-Eastern Nigeria, with a view to setting up Native Administrations which would be more in accordance with the institutions and wishes of the people than the bureaucratic system which had so signally failed " (p. xi). Dr. Meek was sent to assist in these investigations, the results of which are embodied in the volume under review, a general survey of the political and social institutions of the Ibo.

The first nine chapters contain a straightforward and on the whole extremely useful account of the various forms of social and political grouping, and of their associated ritual beliefs and practices. The next chapter, on "Law and its Administration," is, however, disappointing. The order in which "specific classes of cases" are dealt with is very unsystematic, and it appears also that Dr. Meek is not at all clear of the difference in the society between "law" and "custom," even as defined by himself in his Introduction. This comes out still more markedly in the succeeding chapters on "The Law of Marriage," "Birth and the Training of Children," and "Death and Inheritance." These contain a good deal of information which, while interesting as general ethnography, can only be regarded as irrelevant in a work ostensibly limited to government and law. We feel that the book would have gained considerably in value had more discrimination been shown here in the selection and arrangement of material. We miss also any reference to changes that have taken place in the traditional system of law since contact with Europeans was established. This again is one of the more important problems involved in any attempt to maintain a system of indirect rule, and should have figured prominently in what is otherwise a useful and sane final chapter on "Practical Conclusions." Dr. Meek's work exemplifies the practical value of anthropology to colonial administrations, but it also illustrates the failure of many anthropologists to recognise just how much of their collected material is directly relevant to the problems of the administrator. I. SCHAPERA.

Zentralsudanische Studien, edited by Johannes Lukas. Hamburg, 1937.
Published by Friederichsen, de Gruyter and Co., as Vol. 45 in the
Beries Abhandlungen aus dem Gebiet der Auslandskunde issued by
the Hanseatic University 40 192 pp., map, 10.M.

This book is a compilation of material concerning certain languages of the Central Sudan, gathered at various periods by four different investigators, and now edited and published for the first time by the latest of these. The bulk of the material consists of some of the linguistic data gathered by Duke Adolf Friedrich zu Mecklenburg and Captain v. Wiese und Kaiserswaldau in the course of the German Expedition to Central Africa in 1910-11; but it also includes a small portion of the linguistic collections made by Dr. Gustav Nachtigal¹, the noted German explorer of the Sudan and Sahara. Finally, the editor has included some of the results of his own investigations in the Lake Chad area in 1933.

The book opens with an introduction by Dr. Lukas,² a select bibliography of published linguistic and other works dealing with the area treated or closely-connected areas, and a table of sounds. Then follow thirty-eight sections, presenting material concerning as many languages. The languages are arranged in nineteen groups, according to the affinities which Dr. Lukas believes to exist between them. A map of the area is given at the end.

Both the quantity and the quality of the material given vary greatly. In some cases, particularly for those languages for which Dr. Lukas is himself responsible, we are given fairly full and accurate notes on phonetics and grammar, with sizable two-directional vocabularies: in others, sketchy one-directional vocabularies, in not too reliable orthographies, are all we get; and between these two extremes there is great variation. Such variation, as Dr. Lukas points out, is due not only to the conditions under which the material was collected, but also to the difference in the training and competence of the investigators.

The work forms a most useful addition to our knowledge of the linguistic situation in the area concerned. Besides containing a fair bulk of raw material which now sees the light of day for the first time, it also contains, in Dr. Lukas' grouping and in the reasons given therefor in his introduction and in the notes at the beginning of each of the sections, a

¹ The dates of the Nachtigal material do not appear to be given. Readers will, however, remember that Nachtigal visited the Central Sudan in about 1870; and presumably the collections date from then.

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An unfortunate error — for which the reviewer was not responsible — occurred repeatedly in the spelling of Dr. Lukas' name in the review of his Logone-Sprache (Bantu Studies, XI, 2, pp, 149-50).

tentative effort at a genealogical classification of the numerous and heterogeneous forms of speech found in the Central Sudan. Of the detailed merits or demerits of the classification given, the present reviewer, not being a Sudanic specialist, does not feel himself competent to speak. It may be remarked, however, that Dr. Lukas has been, on the whole, rightly conservative in this matter, and appears to have grouped together only languages whose affinities seem obvious on the face of things. In any case, whether his groups are to be finally accepted or not, he has performed a very difficult and meritorious piece of work in rescuing so much interesting and useful matter from oblivion, and is to be congratulated on his enterprise.

G. P. LESTRADE.

Moretlo, by Sam. S. Mafoyanc. ix + 85 pp. London Mission, Tiger Kloof, 1937. 1/- net.

This little volume—which is, as far as can be ascertained, the first collection of almost purely secular verse to be published in the language—forms a modest but not unentertaining addition to the as yet far too small body of Tswana literature, as well as an unpretentious sample of the new type of poetical expression that is emerging among the South African Bantu.

The subjects treated of are very varied, ranging from old tribal history to aspects of modern Native life, from animals and natural phenomena to man and his activities, and from children's jingles to the musings of the adult mind. The level of treatment is, on the whole, pedestrian, and some of the verses are frankly banal. The author is as yet a versifier, and no poet, and only rarely strikes a deeper note. The riddles and children's jingles, naive as they are, constitute perhaps the best efforts at capturing poetic magic, and are in any case far superior to the didactic pieces, where inspiration seems to be lacking completely.

With the exception of one or two pieces in indigenous praise-poem form, the verses are built up on European lines, and follow rules of European prosody, except that rhyme is not attempted, though some use is made of assonance. It would have been better, perhaps, if the author had not attempted to stretch his Muse on this Procrustean bed: as it is, he has had to outrage Tswana rules of stress-accent in word, phrase and sentence, not once but many times, to make his language fit the European verse-forms employed. Let us hope that, on a future occasion, he will abandon the unsatisfactory attempt, and come out with verse frankly Tswana in form as in language.

The paper and printing are good, and there are very few misprints; and the Lovedale Press are to be congratulated in these respects. It is a pity, however, that even at the cost of adding a few pence to the price of the book, a more substantial cover was not provided.

G.P.L.

